

#### CITY OF PROVIDENCE, RHODE ISLAND

**Department: Parks** 

**RFP Title: Roger Williams Park Stormwater Treatment Train** 

Opening Date: 6/5/23

Addendum #: #1

Issue Date: 5/30/23

The purpose of this addendum is Please See Attached - Clarifications to Plans & Specifications along with questions asked and answered at the Pre-Bid Meeting.



#### WENDY NILSSON Superintendent of Parks

BRETT P. SMILEY Mayor

#### Addendum #1

#### Roger Williams Park Stormwater Treatment Train

May 25, 2023

**Total Pages Including Cover (48 Pages)** 

Acknowledge Addenda on Bid Form

#### **Attachments:**

- 1. Addendum Cover Page (2 pages)
- 2. Pre-Bid Meeting Minutes (5 pages)
- 3. Davis-Bacon Prevailing Wage Determination May 12, 2023 Revision (13 pages)
- 4. RIDEM Freshwater Wetland Permit (3 pages)
- 5. Request for Proposals
  - a. Revised Page 16 of 30 (1 page)
  - b. Revised Page 17 of 30 (1 page)
  - c. Revised Page 18 of 30 (1 page)
  - d. Revised Page 19 of 30 (1 page)
- 6. Revised Section 01150 Measurement and Payment (14 pages)
- 7. Revised Drawings
  - a. Sheet C4.0, 6 of 15 (1 page)
  - b. Sheet C5.2, 8 of 15 (1 page)
  - c. Sheet C5.3, 9 of 15 (1 page)
  - d. Sheet C5.4, 10 of 15 (1 page)
  - e. Sheet C5.5, 11 of 15 (1 page)
  - f. Sheet C5.6, 12 of 15 (1 page)
  - g. Sheet C5.7, 13 of 15 (1 page)



#### WENDY NILSSON Superintendent of Parks

BRETT P. SMILEY Mayor

#### **Questions/Clarifications:**

- 1. Is there any flexibility on schedule? The project schedule is set to complete construction and distribute final payment in advance of a December 31, 2023 deadline for funds stipulated in the Rhode Island Infrastructure Bank grant. We are aware the lead time on the Jellyfish component from Contech may be longer than originally anticipated. We will evaluate this further to determine if a schedule extension is necessary.
- 2. How will existing concrete walkway damaged in the normal course of construction but outside the limits of disturbance be handled? Replacement of existing concrete walkways outside the limits of disturbance, when directed by Owner, will be paid for under the allowance established for this Contract. The Allowance amount has been increased from \$15,000 to \$25,000. New concrete walkway within the project limits of disturbance will continue to be paid for at the unit price bid item included on the Bid Form.



#### PRE-BID MEETING MINUTES

# Roger Williams Park Stormwater Treatment Train Providence, Rhode Island

**Date and Location:** May 22, 2023 at 9:00 A.M.

Roger Williams Park Casino Parking Lot

A non-mandatory pre-bid meeting was held on Monday May 22, 2023, starting at the Roger Williams Park Casino Parking Lot and ending at the project site. Meeting began 9:00 A.M. and adjourned at approximately 9:45 A.M. The attendance sign-in sheet is attached.

#### **Items Discussed:**

- 1. This is a non-mandatory pre-bid meeting for the Roger Williams Park Stormwater Treatment Train. Bids are due on June 5, 2023.
- 2. Revisions to Bid Documents, Plans, and Specifications will be issued by addenda. We expect to issue Addendum No. 1 by Friday, May 26, 2023.
- 3. Project is funded by a grant administered by the Rhode Island Infrastructure Bank.
  - a. Project shall be completed in Fall 2023. Grant funds must be entirely distributed by December 31, 2023.
- 4. Bid Bond, Performance Bond, and Payment Bond are all required.
- 5. MBE/WBE Utilization 10% MBE/10% WBE Submit All Paperwork
  - a. Regardless of whether or not sub-contractors are utilized, the MBE/WBE Waiver Request Form needs to be signed by the MBE/WBE Outreach Director.
  - b. The form needs to be sent to <a href="mailto:mbe-wbe@providenceri.gov">mbe-wbe@providenceri.gov</a> for a signature prior to submitting the bid.
  - c. The Parks Department encourages all vendors to seek qualified MBE/WBE Sub-Contractors for utilization on this project.
  - d. All bidders shall provided the required forms, even if prime Contractor is a registered MBE/WBE firm. Bids that do not include all required forms will be considered non-responsive.
- 6. Apprenticeship Requirements
  - a. Construction contracts of \$100,000 or more requires that no less than 15% of the total labor hours performed by contractors and subcontractors on any given project are to be completed by apprentices registered in state-registered apprenticeship programs. Note that this is not a criterion for bid award.
  - b. This requirement pertains to all labor hours for a given project, not just those for new hires.

#### 7. "First Source" Requirements

- a. When hiring new workers for a construction project, employers seek to hire Providence residents when available
- b. If the awarded contractor, regardless of tier, is a signatory to a Collective Bargaining Agreement that governs the contractor's hiring and referral process, the contractor must contact both Building Futures and the local hiring halls to request apprentices or journey workers who are residents of Providence.

#### 8. Retainage

- a. 5% will be held from Pay Requests until project completion
- b. Reduction at Substantial Completion (85%) to 2.5%
- c. Additional 3% held for out of state contractors

#### 9. Insurance Certificate

- a. Insurance certificates are not required with bid but shall be issued after Award.
- b. Shall include: Project Name, City of Providence (and Funder) as 'Additionally Insured on a primary but non-contributing basis for General Liability Insurance per Written Contract or Agreement'

#### 10. Permits

- a. Contractor's Responsibility to Seek Out if Permit is Needed
- b. The City Permit Fee will be Waived (Contact when Submitting)
- c. State ADA Fee is not waived.
- d. RIDEM issued a Freshwater Wetlands permit for this project, which will be provided in Addendum No. 1.

#### 11. Prevailing Wage Requirements

- a. Wage Decision in RFP is superseded with current wage rates revised on May 12, 2023
- b. Certified Payrolls to be Submitted with Pay Requisitions

#### 12. Sub-Contractor Utilization Form

a. Submitted with Pay Requests on forms provided by City.

#### 13. Submittals

- a. Need Written Approval prior to purchase of <u>any</u> Materials
- b. Substitutions must include 'Side by Side Comparison'

#### 14. Schedule of Values / Sequence of Work

- a. Submitted after Award but prior to mobilization
- b. City expects a Continuous Operation (No Demobilizations)
- c. Liquidated Damages Not Included

#### 15. Working Hours

- a. Monday Friday 7:00 am 3:30 pm
- b. Weekends or Extended Hours Requires Pre-Approval
- c. Working hours are based on minimizing impacts on events held at the Roger Williams Park Casino.

#### 16. Job Site Conduct

- a. Parks are smoke free 'No Smoking'
- b. No Loud Music
- c. Equipment and Vehicles In working Order No Leaks

#### 17. Pay Requests

- a. Shall be submitted on the 15<sup>th</sup> of the month unless alternate schedule is agreed to after Award
- b. Certified Payrolls need to accompany pay requests or they will not be processed

#### 18. Waiver of Lien or Release

a. Not required for this project

#### 19. Site Restrictions

- a. Access is limited to certain areas. The Contractor shall protect their work site at all times with temporary construction fence to limit liability.
- b. Deliveries must be coordinated with City's Project Manager (Brian Byrnes). Provide a minimum 48-hours advanced notice.
- c. Overweight deliveries shall access Roger Williams Park from Park Avenue and travel in the opposite direction up the one-way road to the project site. Providence Parks Department staff will provide traffic controls and signage at no cost to Contractor.
- d. Other construction vehicles shall use Maple Avenue to access the project site.
- e. Overweight vehicles and deliveries are prohibited to travel over bridges in Roger Williams Park.
- f. Contractor has control of the site from mobilization and until demobilization.
- g. Owner will be allowed access at all times.

#### 20. Project Description

- a. Stormwater treatment train proposed to treat stormwater entering Roosevelt Pond via a 48-inch outfall.
- b. A cast in place diversion manhole is proposed with stop logs to divert storm flow to the treatment train.
- c. First component in treatment train is a proprietary treatment unit, Jellyfish by Contech or approved equal.
- d. Second component in treatment train is a precast concrete tank with filter media, consisting of Biochar.
- e. A concrete manhole and polypropylene basins are proposed upstream and downstream of treatment components for future sampling and monitoring by Owner and their partners. Metering equipment to be provided by others and is not included in this Contract.

- f. Treated effluent will discharge back to pond through a new outfall. Modifications to existing retaining wall along pond are required to accommodate new outfall.
- g. All tanks and access covers shall be rated for H-20 wheel loads.
- h. New concrete walk is required within the entire limits of the project site as shown on the Drawings, and is included as a bid item in the Contract. The City will consider an allowance for repair of concrete walks that are outside the project limits but travelled on as part of this construction.
- i. The water level in the pond does not fluctuate significantly and is controlled by a dam. There are no controls on the dam.
- j. A test hole was performed in the project area and a possible 18-inch wide concrete duct bank was found approximately 18 inches below grade within the project limits. Contractor shall expose the limits of this and coordinate with City to verify whether it is active, as part of this Contract. If inactive, Contractor shall remove to allow for proposed construction. Relocation of the duct bank, if active, is not included in the Contract.

Questions regarding this bid package shall be submitted by email to Purchasing at <a href="mailto:purchasing@providenceri.gov">purchasing@providenceri.gov</a> and **Brian Byrnes at <a href="mailto:bbyrnes@providenceri.gov">bbyrnes@providenceri.gov</a>**, no later than five (5) working days before the bid opening date.

#### Parks Department Contact Information

Brian F. Byrnes (Primary Contact)
Deputy Superintendent
401-660-9308
bbyrnes@providenceri.gov

Attachment: Sign-in Sheet

# Sign-In Sheet

# **Non-Mandatory Pre-Bid Meeting**

Monday, May 22, 2022 at 9:00 AM – RWP Casino Parking Lot (Site)

Project: Roger Williams Park Stormwater Treatment Train

			Chris Reynolds	HOG KEY	Brandon Blandnerd	Ryan Kond	Brian Byputes	NAME
			Dubon MASony	LEY COLV.	Pare Corporation	115	Province FARKS	COMPANY
			ESTIMATING O DUSON MUSSING.	HUCOE VERCORROMSTRA	bblanchand epase corp. com	, Koppe ass: . org	Boyrnese providenceri gov	E-MAIL
			60 208 J 208	CTM 401-855.	401 334 4100	719241269	401-140-9308	PHONE

"General Decision Number: RI20230001 05/12/2023

Superseded General Decision Number: RI20220001

State: Rhode Island

Construction Types: Building, Heavy (Heavy and Marine) and

Highway

Counties: Rhode Island Statewide.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) HEAVY, HIGHWAY AND MARINE CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- . Executive Order 14026 generally applies to the contract.
- all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.

If the contract was awarded on . or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- Executive Order 13658 generally applies to the contract.
- . The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication 0 01/06/3 01/13/3 01/13/3 02/03/3 03/17/3 4 04/14/3 5 05/12/3	2023 2023 2023 2023	
ASBE0006-006 06/01/2022		
	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)	\$ 38.30	25.55
ASBE0006-008 09/01/2021		
	Rates	Fringes
Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems	s.\$ 45.00	32.89
BOIL0029-001 01/01/2021		
	Rates	Fringes
BOILERMAKER	\$ 45.87	29.02
DDDT0003 004 06 /04 /0003		
BRRI0003-001 06/01/2022		
BRR10003-001 06/01/2022	Rates	Fringes
Bricklayer, Stonemason, Pointer, Caulker & Cleaner	\$ 46.86	Fringes 29.14
Bricklayer, Stonemason, Pointer, Caulker & Cleaner	\$ 46.86	29.14
Bricklayer, Stonemason, Pointer, Caulker & Cleaner	\$ 46.86	29.14
Bricklayer, Stonemason, Pointer, Caulker & Cleaner	\$ 46.86  Rates\$ 46.54	29.14 Fringes 30.34
Bricklayer, Stonemason, Pointer, Caulker & Cleaner  BRRI0003-002 09/01/2022  Marble Setter, Terrazzo Worker & Tile Setter	\$ 46.86  Rates\$ 46.54	29.14 Fringes 30.34
Bricklayer, Stonemason, Pointer, Caulker & Cleaner  BRRI0003-002 09/01/2022  Marble Setter, Terrazzo Worker & Tile Setter	\$ 46.86  Rates\$ 46.54	29.14 Fringes 30.34
Bricklayer, Stonemason, Pointer, Caulker & Cleaner  BRRI0003-002 09/01/2022  Marble Setter, Terrazzo Worker & Tile Setter	\$ 46.86  Rates \$ 46.54  Rates	29.14  Fringes  30.34  Fringes  29.61
Bricklayer, Stonemason, Pointer, Caulker & Cleaner  BRRI0003-002 09/01/2022  Marble Setter, Terrazzo Worker & Tile Setter  BRRI0003-003 09/01/2022  Marble, Tile & Terrazzo Finisher	\$ 46.86  Rates \$ 46.54  Rates	29.14  Fringes  30.34  Fringes  29.61

CARPENTER (Includes Soft

Floor Layer)\$	41.53	29.35
Diver Tender\$	42.53	29.35
DIVER\$	53.88	29.35
Piledriver\$	41.53	29.35
WELDER\$ 4	42.53	29.35

#### FOOTNOTES:

When not diving or tending the diver, the diver and diver tender shall receive the piledriver rate. Diver tenders shall receive \$1.00 per hour above the pile driver rate when tending the diver.

Work on free-standing stacks, concrete silos & public utility electrical power houses, which are over 35 ft. in height when constructed: \$.50 per hour additional.

Work on exterior concrete shear wall gang forms, 45 ft. or more above ground elevation or on setback: \$.50 per hour additional.

The designated piledriver, known as the ""monkey"": \$1.00 per hour additional.

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#### CARP1121-002 01/02/2023

	Rates	Fringes
MILLWRIGHT	\$ 41.54	30.73
ELEC0099-002 12/05/2022		
	Rates	Fringes

		8
ELECTRICIAN	\$ 45.86	53.26%
Teledata System Installer	\$ 34.40	12.10%+15.31

#### FOOTNOTES:

Work of a hazardous nature, or where the work height is 30 ft. or more from the floor, except when working OSHA-approved lifts: 20% per hour additional.

Work in tunnels below ground level in combined sewer outfall: 20% per hour additional.

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#### ELEV0039-001 01/01/2023

	Rates	Fringes
ELEVATOR MECHANIC	\$ 59.36	37.335+a+b

#### FOOTNOTES:

- a. PAID HOLIDAYS: New Years Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.
- b. Employer contributes 8% basic hourly rate for 5 years or more of service of 6% basic hourly rate for 6 months to 5 years of service as vacation pay credit.

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Rates Fringes

Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)

GROUP	1\$	43.55	29.25+a
GROUP	2\$	41.55	29.25+a
GROUP	3\$	37.17	29.25+a
GROUP	4\$	34.32	29.25+a
GROUP	5\$	40.60	29.25+a
GROUP	6\$	31.40	29.25+a
GROUP	7\$	25.40	29.25+a
GROUP	8\$	37.25	29.25+a
GROUP	9\$	41.17	29.25+a

#### a. BOOM LENGTHS, INCLUDING JIBS:

150 feet and over + \$ 2.00 180 feet and over + \$ 3.00 210 feet and over + \$ 4.00 240 feet and over + \$ 5.00 270 feet and over + \$ 7.00 300 feet and over + \$ 8.00 350 feet and over + \$ 9.00 400 feet and over + \$ 10.00

#### a. PAID HOLIDAYS:

New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

#### a. FOOTNOTES:

Hazmat work: \$2.00 per hour additional.
Tunnel/Shaft work: \$5.00 per hour additional.

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

GROUP 2: Digging machine, Ross Carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, graders, front end loader (3 yds. and over), vibratory hammer & vacuum truck, roadheaders, forklifts, economobile type equipment, tunnel boring machines, concrete pump and on site concrete plants.

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

GROUP 5: Bulldozer, bobcats, skid steer loader, tractor, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile-powered sweeper (3-yd. capacity), 8-ft. sweeper minimum 65 HP).

GROUP 6: Well-point installation crew.

#### GROUP 7: Utility Engineers and Signal Persons

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator and light plant, gas and electric driven pump and air compressor.

GROUP 9: Boat & tug operator.

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ENGI0057-002 05/01/2022

		Rates	Fringes
(highway co projects; w projects wh to highway projects; a	ment Operator nstruction ater and sewerline ich are incidental construction nd bridge projects span water) 1	\$ 31.40 \$ 25.40 \$ 31.98 \$ 35.68 \$ 35.30	29.25+a 29.25+a 29.25+a 29.25+a 29.25+a 29.25+a 29.25+a
GROUP GROUP	8 9	\$ 32.33	29.25+a 29.25+a

- a. FOOTNOTE: a. Any employee who works three days in the week in which a holiday falls shall be paid for the holiday.
- a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day.

#### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Digging machine, crane, piledriver, lighter, locomotive, derrick, hoist, boom truck, John Henry's, directional drilling machine, cold planer, reclaimer, paver, spreader, grader, front end loader (3 yds. and over), vacuum truck, test boring machine operator, veemere saw, water blaster, hydro-demolition robot, forklift, economobile, Ross Carrier, concrete pump operator and boats

- GROUP 2: Well point installation crew
- GROUP 3: Utlity engineers and signal persons
- GROUP 4: Oiler on cranes
  - GROUP 5: Combination loader backhoe, front end loader (less than 3 yds.), forklift, bulldozers & scrapers and boats
- GROUP 6: Roller, skid steer loaders, street sweeper
  - GROUP 7: Gas and electric drive heater, concrete mixer, light plant, welding machine, pump & compressor
- GROUP 8: Stone crusher

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#### ENGI0057-003 06/01/2022

#### BUILDING CONSTRUCTION

		Rates	Fringes
Power Equip	ment Operator		
GROUP	1	.\$ 42.82	29.25+a
GROUP	2	.\$ 40.82	29.25+a
GROUP	3	.\$ 40.60	29.25+a
GROUP	4	.\$ 36.60	29.25+a
GROUP	5	.\$ 33.75	29.25+a
GROUP	6	.\$ 39.90	29.25+a
GROUP	7	.\$ 39.47	29.25+a
GROUP	8	.\$ 36.79	29.25+a

#### a.BOOM LENTHS, INCLUDING JIBS:

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150 ft. and over: + $ 2.00

180 ft. and over: + $ 3.00

210 ft. and over: + $ 4.00

240 ft. and over: + $ 5.00

270 ft. and over: + $ 7.00

300 ft. and over: + $ 8.00

350 ft. and over: + $ 9.00

400 ft. and over: + $ 10.00
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- a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.
- a. FOOTNOTE: Hazmat work: \$2.00 per hour additional. Tunnel/Shaft work: \$5.00 per hour additional.

#### POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks.

GROUP 2: Digging machine, Ross carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, front end loader (3 yds. and over), vibratory hammer and vacuum truck

GROUP 3: Telehandler equipment, forklift, concrete pump &
on-site concrete plant

GROUP 4: Fireman & oiler on cranes

GROUP 5: Oiler on crawler backhoe

GROUP 6: Bulldozer, skid steer loaders, bobcats, tractor, grader, scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile powered sweeper (3 yds. capacity), 8-ft. sweeper (minimum 65 hp)

GROUP 7: Well point installation crew

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator for light plant, gas and electric driven

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#### \* IRON0037-001 03/16/2023

	Rates	Fringes
IRONWORKER	\$ 39.50	32.08
LABO0271-001 05/30/2021		

#### **BUILDING CONSTRUCTION**

	Rat	tes	Fringes
LABORER			
GROUP	1\$ 33	3.55	26.15
GROUP	2\$ 33	3.80	26.15
GROUP	3\$ 34	4.30	26.15
GROUP	4\$ 34	4.55	26.15
GROUP	5\$ 35	5.55	26.15

#### LABORERS CLASSIFICATIONS

GROUP 1: Laborer, Carpenter Tender, Mason Tender, Cement Finisher Tender, Scaffold Erector, Wrecking Laborer, Asbestos Removal [Non-Mechanical Systems]

GROUP 2: Asphalt Raker, Adzemen, Pipe Trench Bracer, Demolition Burner, Chain Saw Operator, Fence & Guard Rail Erector, Setter of Metal Forms for Roadways, Mortar Mixer, Pipelayer, Riprap & Dry Stonewall Builder, Highway Stone Spreader, Pneumatic Tool Operator, Wagon Drill Operator, Tree Trimmer, Barco-Type Jumping Tamper, Mechanical Grinder Operator

#### GROUP 3: Pre-Cast Floor & Roof Plank Erectors

GROUP 4: Air Track Operator, Hydraulic & Similar Self-Powered Drill, Block Paver, Rammer, Curb Setter, Powderman & Blaster

GROUP 5: Toxic Waste Remover

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LAB00271-002 05/30/2021

#### HEAVY AND HIGHWAY CONSTRUCTION

		Rates	Fringes
LABORER			
COMPRESSI	ED AIR		
Group 1		\$ 53.45	24.15
Group 2		\$ 50.98	24.15
Group 3		\$ 40.50	24.15
FREE AIR			
Group 1		\$ 44.05	24.15
Group 2		\$ 43.05	24.15
Group 3		\$ 40.50	24.15
LABORER			
Group 1		\$ 33.55	24.15
			24.15
			24.15
			24.15
			24.15

OPEN AIR CAISSON,
UNDERPINNING WORK AND
BORING CREW
Bottom Man.....\$ 39.55 24.15
Top Man & Laborer.....\$ 38.60 24.15
TEST BORING
Driller.....\$ 40.00 24.15

Laborer....\$ 38.60

#### LABORER CLASSIFICATIONS

GROUP 1: Laborer; Carpenter tender; Cement finisher tender; Wrecking laborer; Asbestos removers [non-mechanical systems]; Plant laborer; Driller in quarries

24.15

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

GROUP 3: Air track drill operator; Hydraulic and similar powered drills; Brick paver; Block paver; Rammer and curb setter; Powderperson and blaster

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

LABORER - COMPRESSED AIR CLASSIFICATIONS

GROUP 1: Mucking machine operator, tunnel laborer, brake person, track person, miner, grout person, lock tender, gauge tender, miner: motor person & all others in compressed air

GROUP 2: Change house attendant, powder watchperson, top person on iron

GROUP 3: Hazardous waste work within the ""HOT"" zone

#### LABORER - FREE AIR CLASSIFICATIONS

GROUP 1: Grout person - pumps, brake person, track person, form mover & stripper (wood & steel), shaft laborer, laborer topside, outside motorperson, miner, conveyor operator, miner welder, heading motorperson, erecting operator, mucking machine operator, nozzle person, rodperson, safety miner, shaft & tunnel, steel & rodperson, mole nipper, concrete worker, form erector (wood, steel and all accessories), cement finisher (this type of work only), top signal person, bottom person (when heading is 50' from shaft), burner, shield operator and TBM operator

GROUP 2: Change house attendant, powder watchperson

GROUP 3: Hazardous waste work within the ""HOT"" zone

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	Rates	Fringes	
PAINTER			
Brush and Roller Epoxy, Tanks, Towers, Swing Stage & Structural	\$ 37.22	23.40	
SteelSpray, Sand & Water	\$ 39.22	23.40	
Blasting		23.40	
Taper Wall Coverer		23.40 23.40	
wall coverer	р <i>37.72</i>		
PAIN0011-006 06/01/2022			
	Rates	Fringes	
GLAZIER	\$ 40.78	23.40	
FOOTNOTES:			
SWING STAGE: \$1.00 per hour addit	ional.		
PAID HOLIDAYS: Labor Day & Christ	mas Day.		
PAIN0011-011 06/01/2022			
	Rates	Fringes	
Painter (Bridge Work)	\$ 55.00	23.75	
PAIN0035-008 06/01/2011			
	Rates	Fringes	
Sign Painter	\$ 24.79	13.72	
PLAS0040-001 06/03/2019			
BUILDING CONSTRUCTION			
	Rates	Fringes	
CEMENT MASON/CONCRETE FINISHER	\$ 36.00	27.15	
FOOTNOTE: Cement Mason: Work on free swinging scaffolds under 3 planks width and which is 20 or more feet above ground and any offset structure: \$.30 per hour additional.			
PLAS0040-002 07/01/2019			
HEAVY AND HIGHWAY CONSTRUCTION			
	Rates	Fringes	
CEMENT MASON/CONCRETE FINISHER	\$ 32.85	22.20	
PLAS0040-003 07/01/2019			
	Rates	Fringes	
PLASTERER	\$ 37.55	27.50	

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	Rates	Fringes
Plumbers and Pipefitters		31.75
ROOF0033-004 12/01/2022		
	Rates	Fringes
ROOFER	\$ 42.23	29.67
SFRI0669-001 04/01/2023		
	Rates	Fringes
SPRINKLER FITTER	•	32.27
SHEE0017-002 12/01/2020		
	Rates	Fringes
Sheet Metal Worker	\$ 38.58	36.73
TEAM0251-001 05/01/2022		
HEAVY AND HIGHWAY CONSTRUCTION		
	Rates	Fringes
TRUCK DRIVER  GROUP 1 GROUP 2 GROUP 3 GROUP 4 GROUP 5 GROUP 6 GROUP 7 GROUP 8 GROUP 9 GROUP 10	28.61 \$ 28.66 \$ 28.71 \$ 28.81 \$ 29.21 \$ 29.41 \$ 28.91 \$ 29.16	32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C \$ 32.10+A+B+C

#### FOOTNOTES:

- A. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus Presidents' Day, Columbus Day, Veteran's Day & V-J Day, providing the employee has worked at least one day in the calendar week in which the holiday falls.
- B. Employee who has been on the payroll for 1 year or more but less than 5 years and has worked 150 Days during the last year of employment shall receive 1 week's paid vacation; 5 to 10 years 2 weeks' paid vacation; 10 or more years 3 week's paid vacation.
- C. Employees on the seniority list shall be paid a one hundred dollar (\$100.00) bonus for every four hundred (400) hours worked, up to a maximum of five hundred dollars (\$500.00)
- All drivers working on a defined hazard material job site shall be paid a premium of \$2.00 per hour over applicable rate.

#### TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Pick-up trucks, station wagons, & panel trucks

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

GROUP 7: Trailers when used on a double hook up (pulling 2 trailers)

GROUP 8: Special earth-moving equipment, under 35 tons

GROUP 9: Special earth-moving equipment, 35 tons or over

GROUP 10: Tractor trailer

\_\_\_\_\_

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

\_\_\_\_\_\_

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate

(weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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- 1.) Has there been an initial decision in the matter? This can be:
- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- $^st$  a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISIO"



# RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER RESOURCES

235 Promenade Street Providence, Rhode Island 02908

May 9, 2023

City of Providence Parks Department Brian Byrnes, Deputy Superintendent of Parks 1000 Elmwood Avenue Providence, RI 02905

#### Freshwater Wetlands Permit

Re: Application No. 23-0081 for the property and project located:

At 1000 Elmwood Avenue (Route 1), and approximately 480 feet south of its intersection with Rose Avenue, Assessor's Plat 90, Lot 157, Providence, RI.

Dear Mr. Byrnes:

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your **Application for a Freshwater Wetlands Permit** as described in Rule 3.11 of the Rules and Regulations Governing the Administration and Enforcement of the Fresh Water Wetlands Act, 250-RICR-150-15-3 ("Rules"). This review included a site inspection of the above referenced property ("subject property") and an evaluation of the proposed construction of a new stormwater treatment train at the location of the existing 48-inch outfall pipe to Roosevelt Lake, with clearing, grading, landscaping, retaining wall work and associated site alterations as illustrated and detailed on site plans submitted with your application. These site plans were received by the DEM on April 7, 2023.

Our observations of the subject property, review of the site plans and evaluation of the proposed project reveals that alterations of jurisdictional areas are proposed. However, pursuant to Rule 3.7.3B of the Rules for Public and Governmental Bodies, this project meets the Variance Criteria, and a **Freshwater Wetlands Permit** may be issued under the following terms and conditions:

Terms and Conditions for Wetlands Application No. 23-0081:

- 1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, R.I. Gen. Laws § 2-1-18 et seq.
- 2. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plans submitted with your application and received by the DEM on April 7, 2023. A copy of the site plans stamped approved by the DEM is enclosed. Changes or revisions to the project that would alter jurisdictional areas are not authorized without a permit from the DEM.
- 3. Where the terms and conditions of the permit conflict with the approved site plans, these terms and conditions shall be deemed to supersede the site plans.
- 4. You must notify this Program in writing of the anticipated start date, and of your contractor's contact information, by submitting the Notice of Start of Construction Form prior to commencement of any

Telephone 401.222.4700 | www.dem.ri.gov | Rhode Island Relay 711

permitted site alterations or construction activity. You must also notify this Program in writing upon completion of the project. The Start of Construction Form can be found on the webpage: dem.ri.gov/stormwaterconstruction.

- 5. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM or city representative upon request.
- 6. Within ten (10) days of the receipt of this permit, you must record this permit in the land evidence records of the City of Providence and supply this Program with written documentation obtained from the City showing this permit was recorded.
- 7. The effective date of this permit is the date this letter was issued. This permit expires five (5) years from the date of this letter unless renewed pursuant to the Rules.
- 8. Any material utilized in this project must be clean and free of matter that could pollute any jurisdictional area.
- 9. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete.
- 10. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any freshwater wetland, buffer, floodplain, area subject to storm flowage, or area subject to flooding or other jurisdictional areas not subject to disturbance under this permit.
- 11. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls must be removed.
- 12. You are obligated to install, utilize, follow <u>and maintain</u> all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetland, buffer or floodplain or other jurisdictional areas and the functions and values provided by such freshwater wetlands and buffers or floodplain.
- 13. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

Pursuant to the provisions in 250-RICR-150-15-3.8.13 and 250-RICR-150-15-3.14.4(A), as applicable, any properly recorded and valid Freshwater Wetlands Permit is automatically transferred to the new owner upon sale of the property.

Application No. 23-0081 Page 3

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department.

In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction.

Kindly be advised that this permit is not equivalent to a verification of the type or extent of freshwater wetlands or jurisdictional areas on site. Should you wish to have the types and extent of freshwater wetlands verified, you may submit the appropriate application in accordance with 250-RICR-150-15-3.9.3.

This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

Please contact Jessica Lord of this office (telephone: 401-222-6820, ext. 277-7416) should you have any questions regarding this letter.

Sincerely,

Naucy L. Freeman

Nancy L. Freeman, Principal Environmental Scientist Office of Water Resources Freshwater Wetlands Program NLF/JAL/jal

Enclosure: Approved site plans

ec: Brandon Blanchard, P.E., Pare Corporation

Seaver Anderson, Environmental Scientist, Pare Corporation Particia A. Coyne-Fague, Director, City of Providence, DPW



# **BOARD OF CONTRACT AND SUPPLY**CITY OF PROVIDENCE, RHODE ISLAND

#### Roger Williams Park Stormwater Treatment Train

#### **Project Description:**

The work generally consists of construction of a stormwater improvements project at an outfall to Roosevelt Pond within Roger Williams Park in Providence, RI. Work includes implementation of erosion and sedimentation controls; selective demolition and preparation of the site; grading; installation of a stormwater treatment train consisting of a diversion manhole, proprietary stormwater treatment structure, stormwater filter system, stormwater drainage pipes, and other appurtenances associated with a complete and operating system; landscape restoration; restoration of masonry walls and concrete sidewalks; and appurtenant work.

BASE BID: The Base Bid scope of work for this project shall include, but not be limited to the following:

- Remove and Dispose (R&D) existing trees, landscaping, lawn areas, and cement concrete sidewalk where indicated.
- Furnish and Install (F&I) tree protection, erosion and sedimentation controls, temporary facilities and controls, temporary construction fencing, landscape restoration, cement concrete sidewalk restoration, and loam and seed.
- Furnish and Install (F&I) proprietary stormwater treatment system, stormwater treatment filter system, monitoring ports and associated tanks, piping, valves, access covers and structures.
- Remove and Reconstruct (R&R) sections of existing masonry wall around edge of pond where indicated.

In addition to stating the Total Base Bid, the bidder shall state Unit Prices for related work listed under each bid item which represents the work items included in the Total Base Bid. The Unit Prices are quoted for computing adjustments to the Base Bid prior to Contract award, as well as during the course of construction, based upon extra work ordered by the City or for work countermanded, reduced or omitted by the City in order to stay within the Project budget.

Base Bid Items and Unit prices are to be Completed prices to be added or deducted on the basis of quantities of work involved, for each item in place in the unit indicated.

All Work Included in this Project Sha	ll be Completed for the lump sum of:	
		Dollars
(\$	), TOTAL BASE BID	
<u>ALLOWANCE: \$25,000.00</u>		
BASE BID W/ ALLOWANCE:	S	



### BOARD OF CONTRACT AND SUPPLY

CITY OF PROVIDENCE, RHODE ISLAND

#### ADD ALTERNATES:

1. Add Alt #1 Stormwater Treatment Fil	ter System	
	L9	S \$
price in writing		
2. Add Alt #2 F&I Flow Monitoring Equ	ipment	
	L	S
price in writing		
3. Add Alt #3 Furnish Complete Set of R	eplacement Membrane Cartridges	S
	L	S \$
price in writing		
<u>UNIT PRICES – BASE BID:</u>		
1. Mobilization & Demobilization – Lump	Sum	
	L	S s
price in writing		<u></u>
2. R&D (2) Trees – Lump Sum		
	L	S \$
price in writing		
3. Perform Test Pit – EA		
	E	A \$
price in writing		
4. F&I Erosion and Sedimentation Contro	ols – Lump Sum	
	L	2 0
price in writing	Lx	s <u>s</u>
5 El Daghausa Dinamian Manhala Lu	C	
5. F&I Doghouse Diversion Manhole – Lu	.mp Sum	
nutae in southing	L	S
price in writing		
6. F&I Proprietary Membrane Treatment	System – Lump Sum	
	L	S
price in writing		



# **BOARD OF CONTRACT AND SUPPLY** CITY OF PROVIDENCE, RHODE ISLAND

7. F&I Polypropylene Monitoring Port -	Per Each		
		EA	\$
price in writing			·
8. F&I Precast Concrete Manhole – Each	h		
price in writing		EA	\$
price in mining			
9. F&I 15" HDPE Pipe – Per Linear Foo	t		
		LF	<b>\$</b>
price in writing			
10. F&I 16" C900 PVC Pipe – Per Linear	Foot		
		LF	\$
price in writing		LI	<u> </u>
11 F.S.I.C. COOO DVC Ping Poul incom	Foot		
11. F&I 6" C900 PVC Pipe – Per Linear I			
price in writing		LF	\$
12. F&I 6" Gate Valve – Per Each			
		TC A	
price in writing		EA	\$
13. F&I 16" Inline Check Valve – Per Eac	·h		
13. Par 10 Timine Check Valve – Fer Law		<b>-</b> .	
price in writing		EA	\$
14. F&I Pipe Fittings – Lump Sum			
		LS	\$
price in writing			
15. F&I 1" Tap to Existing Water – Lump	Sum		
		LS	\$
price in writing			



# **BOARD OF CONTRACT AND SUPPLY** CITY OF PROVIDENCE, RHODE ISLAND

16. F&I Curb Stop with Box – Lump Sum			
	LS	\$	
price in writing			
17. F&I 1" Water Service Piping – Per Linear Foot			
	LF	\$	
price in writing		-	
18. F&I Ground Hydrant – Per Each			
	EA	\$	
price in writing		·	
19. F&I Cement Concrete Sidewalk – Per Square Yard			
	SY	\$	
price in writing		-	
20. F&I 4" Poured Concrete Equipment Pad – Lump Sum			
	LS	ø	
price in writing	LS	\$	
21. F&I Loam and Seed – Per Square Yard			
	SY	\$	
price in writing			
22. R&R Masonry Wall At Pond – Per Linear Foot			
	LF	\$	
price in writing		·	
Please note that the list above is not intended to include all items required to complet the contract prior to or after award – in the best in	ete the base bid scop nterest of the City of	pe of work but can and s Providence.	hall be used to adjust
	BID	DER:	

#### PART 1 GENERAL

#### 1.1 EXTENT OF WORK

- A. Measurement. The quantities to be measured under the various Bid Items in the Request for Proposals (RFP) will be those quantities of work completed in accordance with the Drawings and specifications. The methods of measurement will be as stated hereinafter for the individual items.
- B. Prices. The unit or lump sum prices for all Bid Items in the RFP shall be full compensation for the work of the Contractor specified and shall include the cost of furnishing all materials, labor, tools and equipment and all work and expense incidental to and necessary to complete the work in accordance with the Drawings and specifications.

#### 1.2 WORK NOT PAID FOR SEPARATELY

- A. Stripping Topsoil. Payment for stripping topsoil, including stockpiling, is included in the prices for the various Items in the Bid and no separate payment will be made thereof.
- B. Earth Excavation. Payment for earth excavation to the depths indicated on the Drawings or authorized by Owner for the construction of all structures, pipelines and appurtenances, including disposal of the excavated materials in fills, backfills, embankments, designated stockpiles, or as spoil, as approved by Owner, is included in the prices for the various Items in the Bid and no separate payment will be made thereof.
- C. Rock Excavation. Payment for the excavation, removal, and disposal of boulders and cobbles up to 1 cubic yard in size is considered earth excavation is included in the prices for the various Items in the Bid. Separate payment will be made for excavation, removal, and disposal of bedrock or boulders larger than 1 cubic yard in diameter, subject to measurement by Contractor and verification by Owner in accordance with project specifications.
- D. Filling, Backfilling, Embankment, and Disposal of Surplus Materials. Payment for filling; backfilling for all structures; underground pipelines and utilities, including appurtenances; construction of embankments; and disposal of surplus material is included in the prices for the various Items in the Bid and no separate payment will be made thereof, except for selected material if needed to complete the work.
- E. Sheeting, Shoring and Bracing. Payment for all necessary sheeting, shoring, and bracing, including design of support systems by a Professional Engineer as required by the project specifications, is included in the prices for the Items in the Bid and no separate payment shall be made thereof.
- F. Pumping, Draining, and Bailing. Payment for all necessary pumping, draining, bailing, etc., including the use of underdrains or well points, is included in the prices for the various Items in the Bid and no separate payment will be made thereof.

- G. Preparation of Site. Payment for preparation of site is included in the Lump Sum Price provided for Item 1 in the Bid and no separate payment will be made thereof. Preparation of site includes setting up construction plant, offices, shops, storage areas, sanitary and other facilities required by the specifications or state law or regulations; providing access to the site; obtaining necessary permits and licenses; and payment of fees; general protection, temporary heat and utilities; providing shop and working drawings, certificates and schedules; sampling and testing materials; providing required insurance; cleaning up, and all other work regardless of its nature which may not be specifically referred to in the Bid but is necessary for the complete construction of the project set forth by the contract.
- H. Environmental Protection. Payment for work under this Section is included in the prices for the various Bid Items in the RFP and no separate payment will be made thereof.
- I. Pavement and Sidewalk Removal. Payment for bituminous concrete pavement or cement concrete sidewalk excavation and disposal is included in the prices for the various Bid Items in the Bid and no separate payment will be made thereof.
- J. No separate payments will be made for cleaning up. Such clean-up shall be considered incidental to the item to which it applies and shall be included in the price for that item.
- K. All existing work removed or damaged by the Contractor's operations shall be replaced to the satisfaction of the Owner at no additional expense to the Owner.
- L. No separate payment will be made for Division 1 General Requirements. Contractor shall incorporate the cost for these items into the Bid Items listed in the RFP.
- M. All disturbed areas outside the limits of disturbance shall be restored at the Contractor's expense to the satisfaction of the Owner.

#### 1.3 BID ITEMS

A. Appurtenant items of work shown on the drawings or specified which are required to complete the work but are not listed separately under the various applicable bid items of work, shall have no separate payment for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete items.

#### 1.4 MEASUREMENT

A. The measurement of all quantities of items listed in the Bid Form shall be done by the Contractor. The measurement will include proper and complete documentation of all items to the satisfaction of the Owner prior to the submission for payment. The measurement submitted shall be in the same unit description listed in the Bid Form.

#### 1.5 PAYMENT

A. Payments shall be made to the Contractor only after proper documentation of the unit quantity provided or percentage of work completed, and in accordance with the contract

terms and conditions regarding payment.

- B. Payment for bid items shall include full compensation for all incidentals required for the complete installation of the completed product.
- C. Payment shall be made only for that work which is performed within the pay limits shown on the Drawings or detailed in the Specifications. No payment shall be made for work beyond these limits unless the work has been authorized by Owner in writing.

#### PART 2 PRODUCTS

#### 2.01 MOBILIZATION AND DEMOBILIZATION (BID ITEM NO. 1)

#### A. Measurement

- 1. The Work of this section shall be measured as specified at the Lump Sum price provided in the Bid. The payable quantity will be for the preparatory work and operations, which must be performed or for costs which must be incurred prior to beginning work, final cleanup, and demobilization of temporary facilities and equipment, restoration of impacted areas disturbed due to construction of all temporary facilities, preparation of as-built drawings, and the cost of payment and performance bonds as well as fees for all permits and Federal, State, and local approvals.
- 2. Mobilization shall include, but is not limited to, movement of personnel, equipment, supplies, and incidentals to the project site for the establishment of all Contractor's field offices; installing temporary utilities; furnishing and installing temporary fencing; furnishing and installing temporary signage; and furnishing, installing, and maintaining all other temporary facilities necessary for work on the project. Demobilization shall include, but is not limited to, moving out of personnel and equipment, removal and disposal of tracking pads and temporary signage, cleaning entire site, furnishing all required operation and maintenance documentation, and removing debris and rubbish.
- 3. The Lump Sum price provided for Bid Item No. 1 Mobilization and Demobilization shall not exceed 10% of the total amount of this bid.
- 4. There shall be no separate payment associated with furnishing, installing, maintaining, and removing a temporary field office for use by the Contractor.

#### B. Payment

 Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.02 R&D TREES (BID ITEM NO. 2)

#### A. Measurement

1. The work of this section shall be measured as specified at the Lump Sum price provided in the Bid for the complete removal and offsite disposal of trees, where

indicated on the Drawings. Complete removal shall include grubbing roots and stumps. Removal of trees not indicated for removal on the Drawings is prohibited.

#### B. Payment

1. Payment for this item shall be made at the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.03 PERFORM TEST PIT (BID ITEM NO. 3)

#### A. Measurement

1. The work of this section shall be measured as specified for Each test pit, up to a maximum depth of 10 feet and maximum volume of 12 cubic yards, where indicated on the Drawings or otherwise requested by Owner, performed by Contractor. Work shall include all necessary equipment, materials, workmen, and all incidental work to completely excavate each test pit and restore the area once complete.

#### B. Payment

1. Payment for this item shall be made at the per Each price listed in the Bid.

#### 2.04 F&I EROSION AND SEDIMENTATION CONTROLS (BID ITEM NO. 4)

#### A. Measurement

- 1. The Work of this section shall be measured as specified at the Lump Sum price for installation, maintenance, inspection, removal, and disposal of erosion and sedimentation controls where shown on the Contract Drawings and as required by Owner. Work shall include all necessary equipment, materials, workmen, and all incidental work required for completion of the work specified herein and included on the Contract Drawings and in these Specifications.
- 2. This work shall include installation, maintenance, removal, and disposal of all tree and vegetation protection where shown on the Contract Drawings and as required by Owner.

#### B. Payment

 Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.05 F&I DOGHOUSE DIVERSION MANHOLE (BID ITEM NO. 5)

#### A. Measurement

- 1. The work of this item includes all labor, materials, and equipment to furnish and install all required: excavation; excavation support; dewatering; demolition of existing pipe; bedding; formwork; steel reinforcing; concrete work; backfill; compaction; maintenance of existing flow; and all associated appurtenant work, as indicated on the Drawings and as specified, and including all incidental Items required to furnish a complete structure meeting the functional intent described by the Drawings.
- 2. Contractor shall sequence the work to maintain or divert stormwater flow to Roosevelt Pond at all times. Temporary diversion of flow is incidental to the work of this item and no separate payment will be made thereof.
- 3. The work of this item includes furnishing and installing H-20 rated aluminum access hatch in top slab of structure, as manufactured by Bilco or approved equal.
- 4. The work of this item includes furnishing and installing aluminum stop logs and guide frame as detailed on the Drawings. A stop log lifter compatible with the aluminum stop log system shall also be furnished to Owner.

#### B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.06 F&I PROPRIETARY MEMBRANE TREATMENT SYSTEM (BID ITEM NO. 6)

#### A. Measurement

- 1. The work of this item includes all labor, materials, and equipment to furnish and install a proprietary membrane treatment system in accordance with the Drawings and these specifications. This shall include, but not be limited to, all required: excavation; excavation support; dewatering; bedding; backfill; compaction; precast concrete tank; trench and manhole covers to grade; membrane cartridges; and all associated appurtenant work as indicated on the Drawings and as specified including all incidental Items required to furnish a complete structure meeting the functional intent described by the Drawings.
- 2. The proprietary membrane treatment system shall be furnished as a complete operational unit and shall meet the minimum performance requirements stipulated on the Drawings. The system shall be Jellyfish® by Contech Engineered Solutions, LLC, or approved equal.
- 3. Dewatering and support of excavation to properly prepare subgrade and install structure is incidental to the work of this section, and no separate payment will be made thereof.

#### B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.07 F&I POLYPROPYLENE MONITORING PORT (BID ITEM NO. 7)

#### A. Measurement

- 1. The work of this section shall be measured as specified for Each polypropylene monitoring port completely installed in the locations shown on the Drawings and in accordance with project details. This shall include, but not be limited to, all required: excavation; excavation support; dewatering; furnishing and installing proper bedding; backfill; compaction; polypropylene structure; and all associated appurtenant work as indicated on the Drawings.
- 2. Furnishing and installing ductile iron manhole frame and cover to grade is included in this item.

#### B. Payment

 Payment for this item shall be made at the per Each price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.08 F&I PRECAST CONCRETE MANHOLE (BID ITEM NO. 8)

#### A. Measurement

- 1. The work of this section shall be measured as specified for Each precast concrete manhole completely installed in the locations shown on the Drawings and in accordance with project details. This shall include, but not be limited to, furnishing and installing all required: precast manhole sections; excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.
- 2. Furnishing and installing ductile iron manhole frame and cover to grade is included in this item.

#### B. Payment

1. Payment for this item shall be made at the per Each price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and

accepted by Owner.

#### 2.09 F&I 15-INCH HDPE PIPE (BID ITEM NO. 9)

#### A. Measurement

- 1. The work of this section will be measured by the number of linear feet of 15" HDPE pipe actually installed in accordance with the Drawings and/or as directed by Owner.
- 2. The work of this section shall include, but not be limited to, all required: furnishing pipe; excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.
- 3. Structures shall be subtracted from the linear footage quantity; linear footage shall be measured along the centerline of the trench from beginning invert of the pipe to ending invert of the pipe.

#### B. Payment

The accepted quantity of the work in this section will be paid for at the contract unit
price per linear feet as listed in the Bid. The price so-stated constitutes full and
complete compensation for all labor, materials, and equipment and for all other
incidentals required to finish the work, complete and accepted by Owner.

#### 2.10 F&I 16-INCH C-900 PVC PIPE (BID ITEM NO. 10)

#### B. Measurement

- The work of this section will be measured by the number of linear feet of 16" C-900 PVC pipe actually installed in accordance with the Drawings and/or as directed by Owner.
- 2. The work of this section shall include, but not be limited to, all required: furnishing pipe; excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.
- 3. Structures shall be subtracted from the linear footage quantity; linear footage shall be measured along the centerline of the trench from beginning invert of the pipe to ending invert of the pipe.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per linear feet as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.11 F&I 6-INCH C-900 PIPE (BID ITEM NO. 11)

#### A. Measurement

- The work of this section will be measured by the number of linear feet of 6" C-900 PVC pipe actually installed in accordance with the Drawings and/or as directed by Owner.
- 2. The work of this section shall include, but not be limited to, all required: furnishing pipe; excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.
- 3. Structures shall be subtracted from the linear footage quantity; linear footage shall be measured along the centerline of the trench from beginning invert of the pipe to ending invert of the pipe.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per linear feet as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.12 F&I 6-INCH GATE VALVE (BID ITEM NO. 12)

#### A. Measurement

1. The work of this section shall be measured as specified for Each 6-inch valve completely installed in the locations shown on the Drawings and in accordance with project details. The unit price shall constitute full compensation for furnishing and installing valves and valve boxes complete, including all work incidental thereto and not specifically included for payment under other items.

#### B. Payment

 Payment for this item shall be made at the per Each price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.13 F&I 16-INCH INLINE CHECK VALVE (BID ITEM NO. 13)

#### A. Measurement

- 1. The work of this section shall be measured as specified for Each 16-inch inline check valve completely installed in the locations shown on the Drawings and in accordance with project details.
- 2. Inline check valve shall be CheckMate UltraFlex by Tideflex, or approved equal.

#### B. Payment

 Payment for this item shall be made at the per Each price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.14 F&I PIPE FITTINGS (BID ITEM NO. 14)

#### A. Measurement

- 1. The work of this section shall be measured as specified at the Lump Sum Price provided in the Bid Form to furnish and install pipe fittings outside of tanks and structures, where indicated on the Drawings. Fittings include 16"x6" reducer, 16"x16" tee, and 16"x6" tee.
- 2. The work of this section shall include, but not be limited to: furnishing materials; excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.

#### B. Payment

Payment for this item shall be made at the Lump Sum price listed in the Bid. The
price so-stated constitutes full and complete compensation for all labor, materials,
and equipment and for all other incidentals required to finish the work, complete and
accepted by Owner.

#### 2.15 F&I 1" TAP TO EXISTING WATER (BID ITEM NO. 15)

#### A. Measurement

1. The Work of this section shall be measured as specified at the Lump Sum price and shall constitute full compensation for tapping the water main, furnishing and installing service saddle, and furnishing and installing corporation stop in accordance with project details. The work of this section shall also include, but not be limited to, all required: excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.

### B. Payment

Payment for this item shall be made at the Lump Sum price listed in the Bid. The
price so-stated constitutes full and complete compensation for all labor, materials,
and equipment and for all other incidentals required to finish the work, complete
and accepted by Owner.

### 2.16 F&I CURB STOP WITH BOX (BID ITEM NO. 16)

#### A. Measurement

1. The Work of this section shall be measured as specified at the Lump Sum price and shall constitute full compensation for furnishing and installing new curb stop with box to grade. The work of this section shall also include, but not be limited to, all required: excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.

### B. Payment

1. Payment for this item shall be made at the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.17 F&I 1" WATER SERVICE PIPING (BID ITEM NO. 17)

#### A. Measurement

- 1. The work of this section will be measured by the number of linear feet of 1-inch polyethylene water service pipe actually installed in accordance with the Drawings and/or as directed by Owner.
- 2. The work of this section shall also include, but not be limited to, all required: excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.
- 3. Pressure testing of water service shall be included in this item.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per linear feet as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.18 F&I GROUND HYDRANT (BID ITEM NO. 18)

#### A. Measurement

- 1. The work of this section shall be measured as specified for Each non-freeze ground hydrant assembly completely installed as indicated on the Drawings.
- 2. Ground hydrant shall be Zurn Z1360-VB or approved equal.
- 3. The work of this section shall include, but not be limited to, all required: excavation; excavation support; dewatering; bedding; backfill; compaction; and all associated appurtenant work as indicated on the Drawings.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per Each as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.19 F&I CEMENT CONCRETE SIDEWALK (BID ITEM NO. 19)

#### A. Measurement

- 1. The Work of this section shall be measured as specified at the Unit Price provided in the Bid for each square yard of concrete sidewalk installed including rebar, welded wire fabric, and other incidentals necessary for the restoration of sidewalks in accordance with the Drawings and specifications. The work shall include restoration of sidewalks disturbed to a minimum depth to match the existing sidewalk or as called for in the contract documents (whichever is greater) and furnishing and installing gravel borrow sub-base to match a depth called for in contract documents.
- 2. Sawcutting of existing sidewalk is incidental to this work and is included in this item.
- 3. Sidewalk areas that are disturbed outside of the pay limits defined in the contract documents shall be restored by Contractor but not measured for payment unless work beyond the defined limits was previously authorized by Owner.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per square yard as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.20 F&I 4" POURED CONCRETE EQUIPMENT PAD (BID ITEM NO. 20)

#### A. Measurement

- 1. The Work of this section shall be measured as specified at the Lump Sum price and shall constitute full compensation for furnishing and installing a new concrete equipment pad to the specified thickness and dimensions, as indicated on the Drawings.
- 2. The Work includes installing all rebar, welded wire fabric, gravel sub-base, and other incidentals necessary in accordance with the Drawings and Specifications.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the Lump Sum price listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

### 2.21 F&I LOAM AND SEED (BID ITEM NO. 21)

#### A. Measurement

- 1. The Work of this section shall be measured as specified at the Unit Price provided in the Bid for each square yard of existing lawn areas restored with minimum 4 inches of loam and seed meeting project specifications. Only areas that receive a minimum of 4 inches of loam will be measured for payment.
- 2. Areas that are disturbed outside of the pay limits defined in the contract documents shall be restored by Contractor but not measured for payment.
- 3. Costs associated with maintenance of loamed and seeded areas restored as part of this contract are included in this item.

### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per square yard as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

#### 2.22 R&R MASONRY WALL AT POND (BID ITEM NO. 22)

#### A. Measurement

- 1. The Work of this section shall be measured as specified at the Unit Price provided in the Bid for each linear foot of masonry wall removed, reset, and reconstructed to the lines and grades shown on the Drawings.
- 2. Only sections of the wall reconstructed within the limits shown on the Drawings will be eligible for payment.

#### B. Payment

1. The accepted quantity of the work in this section will be paid for at the contract unit price per linear foot of masonry wall removed, reset, and reconstructed as listed in the Bid. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner including new field stone and cement mortar in areas where the wall is to be raised to a new elevation.

# 2.23 ADD-ALTERNATE: STORMWATER TREATMENT FILTER SYSTEM (ADD-ALTERNATE ITEM NO. 1)

#### A. Measurement

1. The work of this item includes all labor, materials, and equipment to furnish and install a media filter treatment system in accordance with the Drawings and these specifications. This shall include, but not be limited to, all required: excavation; excavation support; dewatering; bedding; backfill; compaction; precast concrete tank;

- H-20 rated aluminum access hatch and manhole covers to grade; interior piping; geogrid; double washed peastone filter layer; treatment media; and all associated appurtenant work as indicated on the Drawings and as specified including all incidental Items required to furnish a complete system meeting the functional intent described by the Drawings.
- 2. The treatment media shall be washed Biochar with gradation from ¼" to 1" in particle size. It shall be free of any deleterious material and shall be suitable for use in a stormwater quality treatment system. Biochar material shall be produced locally and furnished in bulk, such as by New England Biochar or approved equal vendor meeting project specifications.

### B. Payment

1. Payment for this item shall be made as a percentage of the Lump Sum price listed in the Bid, if added to the Contract by Owner. The price so-stated constitutes full and complete compensation for all labor, materials, and equipment and for all other incidentals required to finish the work, complete and accepted by Owner.

# 2.24 ADD-ALTERNATE: F&I FLOW MONITORING EQUIPMENT (ADD-ALTERNATE ITEM NO. 2)

#### A. Measurement

1. The Work of this section shall be measured as specified at the Lump Sum Price provided in the Bid to furnish and install a battery-powered non-contact, intrinsically safe velocity sensor flow meter within the precast concrete manhole, as specified on the Drawings. Velocity sensor flow meter shall be LaserFlow by Teledyne ISCO or approved equal. Installation shall be in accordance with manufacturer's recommendations.

#### B. Payment

1. Payment for this item shall be made at the Lump Sum Price listed in the Bid, if added to the Contract by Owner.

# 2.25 ADD-ALTERNATE: FURNISH REPLACEMENT MEMBRANE CARTRIDGES (ADD-ALTERNATE ITEM NO. 3)

#### A. Measurement

1. The Work of this section shall be measured as specified at the Lump Sum Price provided in the Bid for one complete set of replacement membrane filter cartridge furnished to the Owner for future use. Membrane filter cartridges shall meet the same specifications as those installed under this Contract.

#### B. Payment

1. Payment for this item shall be made at the Lump Sum Price listed in the Bid if added

to the Contract by Owner.

#### PART 3 EXECUTION

#### 3.1 BID ITEMS

A. Appurtenant items of work shown on the drawings or described in the specifications are required to complete the work but are not listed separately under the various applicable bid items of work, and no separate payment will be made for such items. It shall be the responsibility of the Contractor to verify any missing or incomplete items.

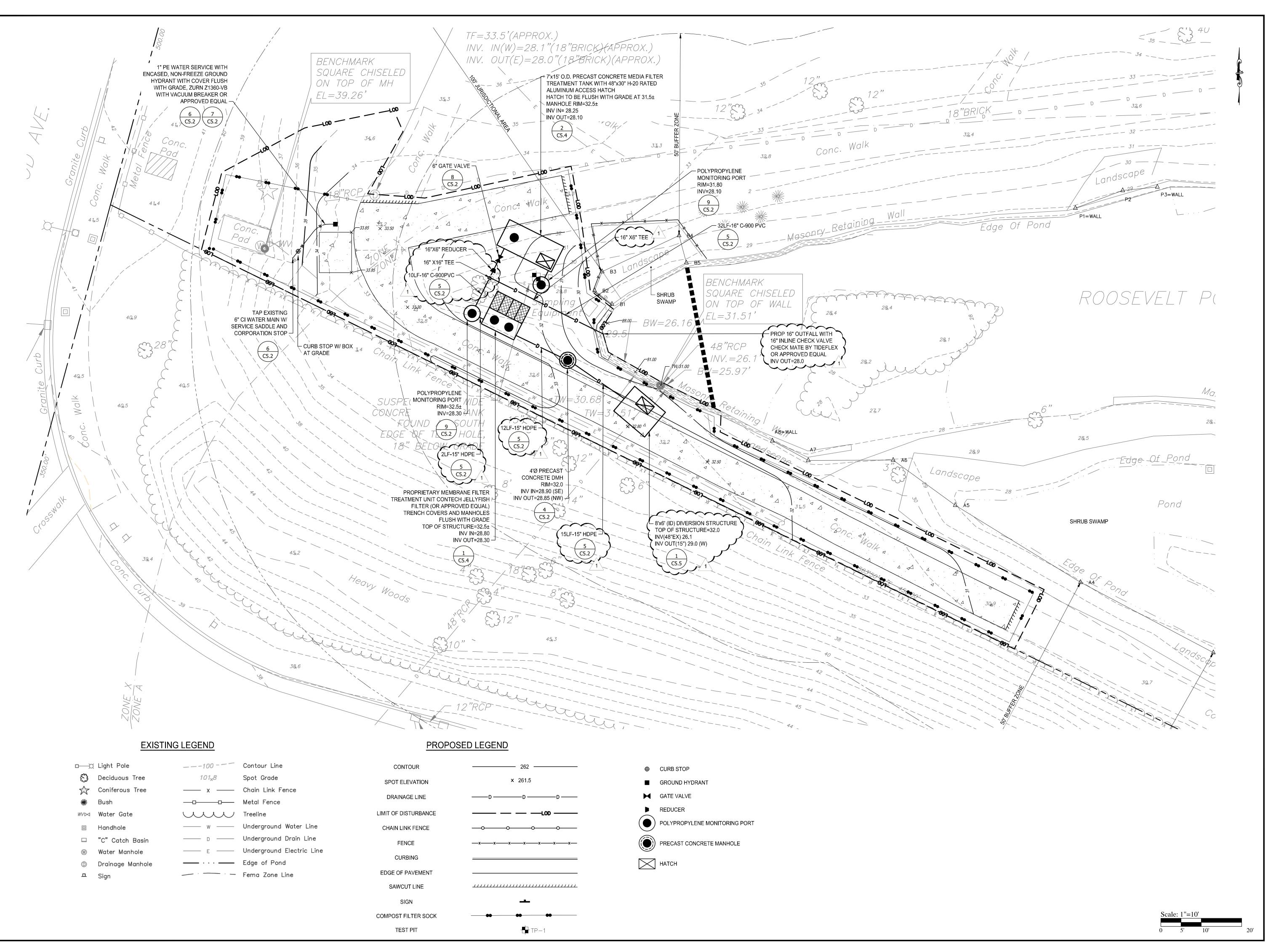
#### 3.2 MEASUREMENT

A. The measurement of all quantities of items listed in the Bid Form shall be done by the Contractor. The measurement will include proper and complete documentation of all items to the satisfaction of the Owner prior to the submission for payment. The measurement submitted shall be in the same unit description listed in the Bid Form.

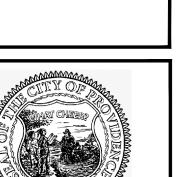
#### 3.3 PAYMENT

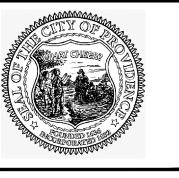
- A. Payments shall be made to the Contractor only after proper documentation of the unit quantity provided and in accordance with the contract terms and conditions regarding payment.
- B. Payment for bid items shall include full compensation for the complete installation of the complete product.

END OF SECTION









SCALE ADJUSTMENT GUIDE ORIGINAL DRAWING

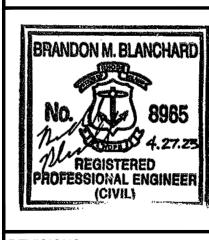
rain

reatment

Williams

BAR IS ONE INCH ON

ormwater Roger St

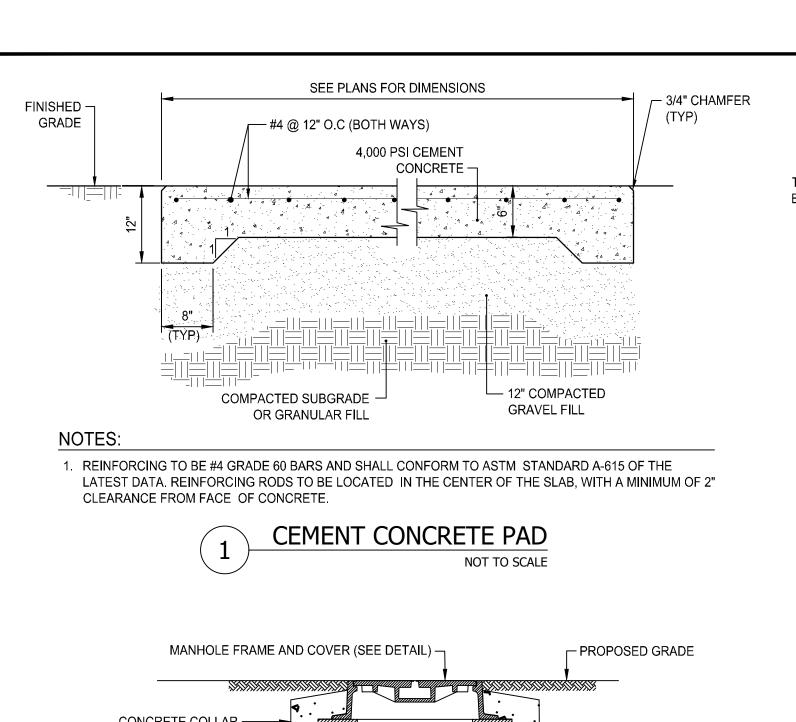


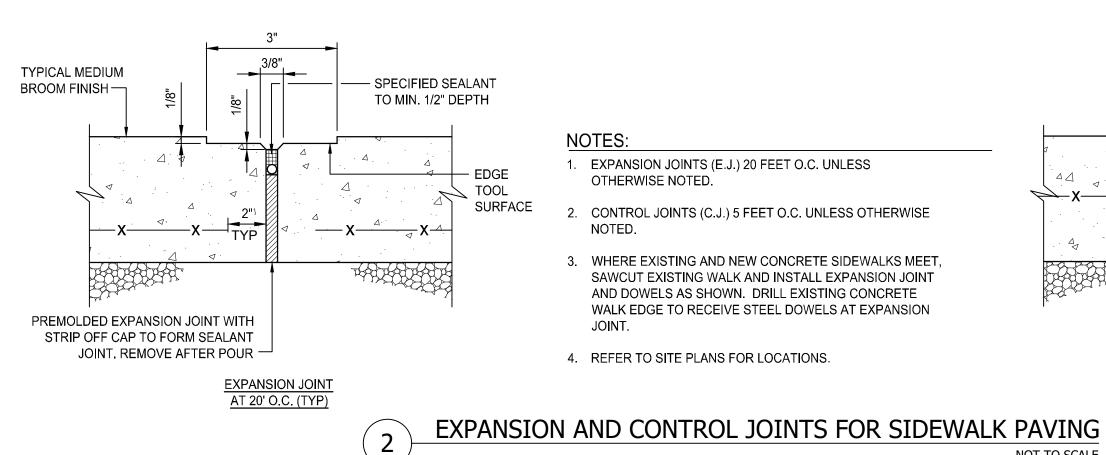
REVISIONS: 5-25-23 ADDENDUM NO.1 PROJECT NO.: 22220.00

**APRIL 2023** SCALE: 1" = 10' DESIGNED BY: CHECKED BY:

DRAWN BY: AWB \ AKL APPROVED BY:

DRAWING NO.: C4.0 SHEET NO.





1. EXPANSION JOINTS (E.J.) 20 FEET O.C. UNLESS OTHERWISE NOTED.

2. CONTROL JOINTS (C.J.) 5 FEET O.C. UNLESS OTHERWISE NOTED.

3. WHERE EXISTING AND NEW CONCRETE SIDEWALKS MEET, SAWCUT EXISTING WALK AND INSTALL EXPANSION JOINT AND DOWELS AS SHOWN. DRILL EXISTING CONCRETE WALK EDGE TO RECEIVE STEEL DOWELS AT EXPANSION

4. REFER TO SITE PLANS FOR LOCATIONS.

ERIE BOX (BINGHAM & TAYLOR

OR APPROVED EQUAL)

CURB STOP

1" PE WATER SERVICE PIPE BURIED BELOW

NOT TO SCALE

AND COMPRESSION FITTINGS

FROST DEPTH WITH STAINLESS STEEL INSERTS

- TOOL CONTROL JOINT TO DIMENSIONS SHOWN WITH 1 1/2" EDGER.

NOT TO SCALE

GRAVEL FILL BASE COURSE └─ 95% COMPACTED SUBGRADE

AS NOTED ON PLANS

─ 4" CEMENT CONCRETE

W/ 6x6x10/10 WELD WIRE

- BROOM FINISH

## NOTES:

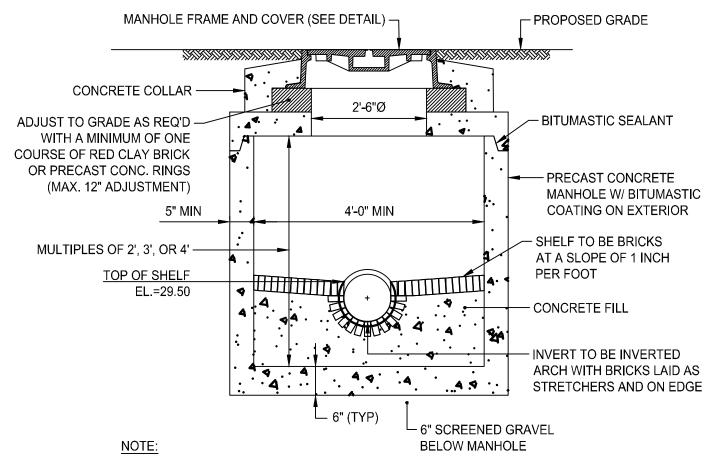
FINISHED

GRADE –

- 1. CONCRETE SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.
- 2. WIRE MESH SHALL BE IN ACCORDANCE WITH SECTION M.05.02 OF THE RI STANDARD SPECIFICATIONS.

TYPICAL CEMENT CONCRETE SIDEWALK NOT TO SCALE





INSTALL BATTERY POWERED VELOCITY SENSOR FLOW METER MOUNTED TO MANHOLE WALLS ABOVE FLOW CHANNEL (PROVIDED BY OWNER). INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. FLOW METER TO BE ISCO LASERFLOW OR APPROVED EQUAL.

PAVED AREAS

BITUMINOUS PAVEMENT AND GRAVEL BASE COURSE.

1'-0"

DENSITY

- SAWCUT EXISTING PAVEMENT. APPLY HOT ASPHALT CRACK SEALANT ALONG

ALL JOINTS (TYP)

— ON-SITE COMMON BORROW OR GRANULAR FILL FREE OF LARGE STONES, FROZEN MATERIAL, ETC., COMPACTED TO MIN. 95% MAXIMUM DRY

3/4" CRUSHED STONE OR SAND

TRENCH EXCAVATION PAY

UNDISTURBED MATERIAL COMPACTED W/ SEVERAL PASSES OF A VIBRATORY

COMPACTOR PRIOR TO PLACEMENT

GRAVEL FILL BEDDING

OF BEDDING



**GRASS AREAS** 

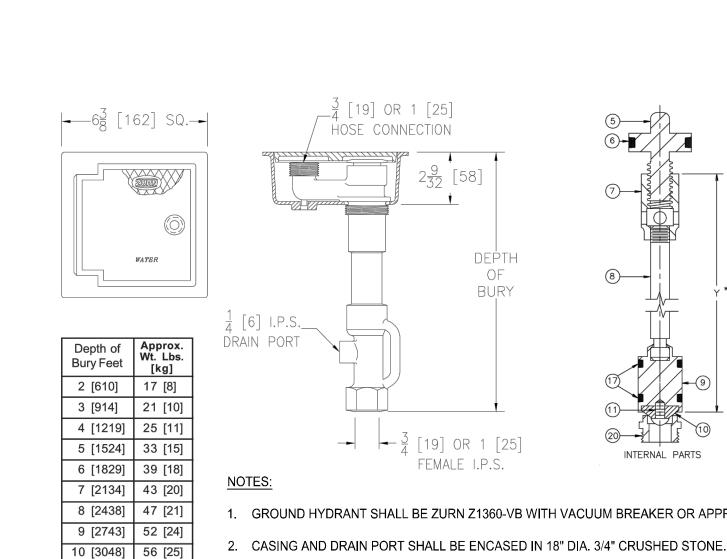
LOAM AND SEED

8" (12" IF

INSTALLED

OVER ROCK) \_

5'-0"

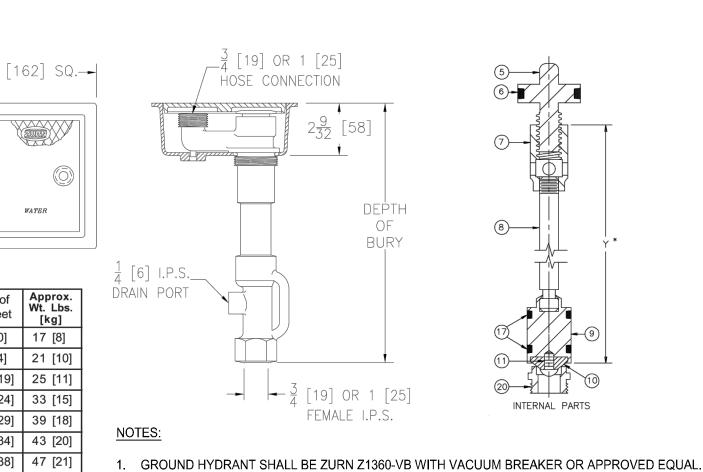


- FULL SLEEVE STAINLESS STEEL SADDLE

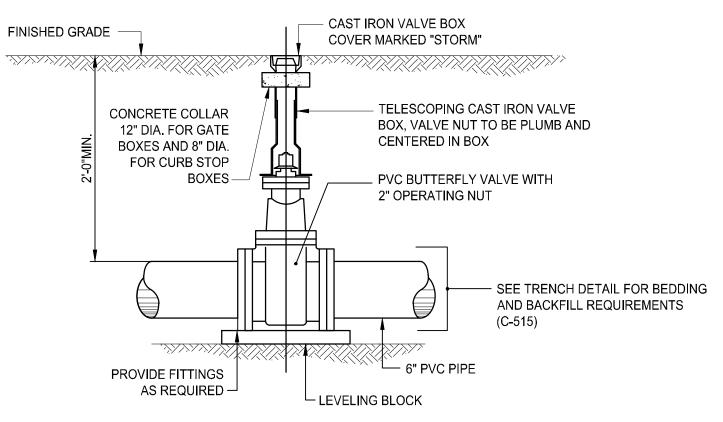
- CORPORATION STOP

LEXISTING 6" CI WATER MAIN

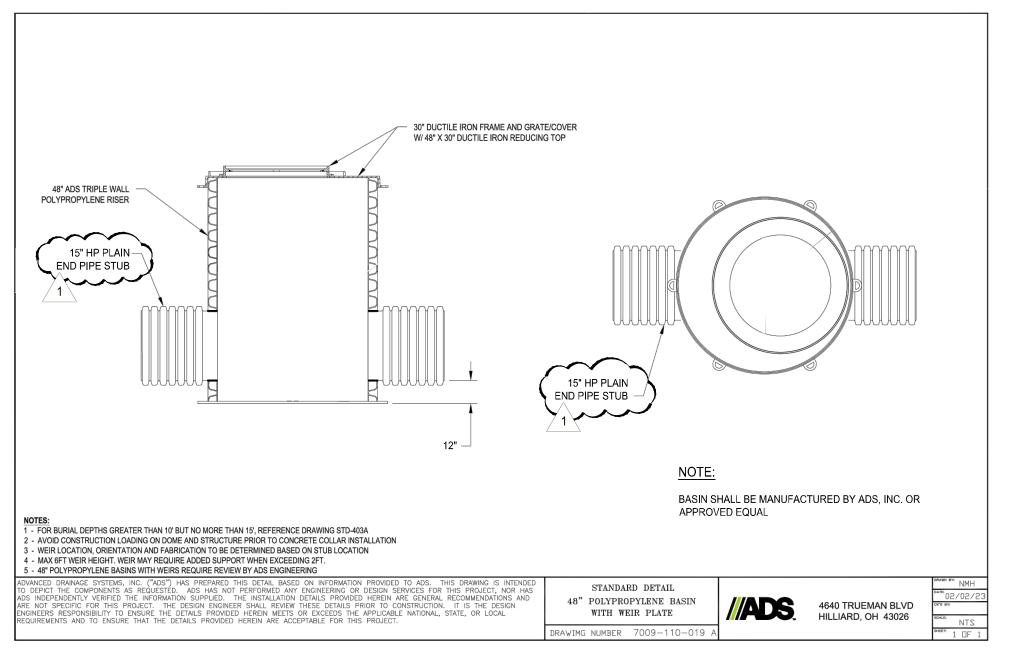
— 1'R (TYP)



GROUND HYDRANT DETAIL NOT TO SCALE

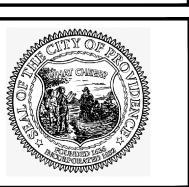


STORMWATER VALVE DETAIL NOT TO SCALE



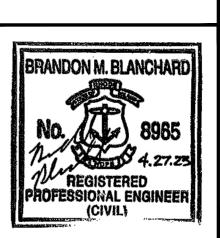






SCALE ADJUSTMENT GUIDE BAR IS ONE INCH ON ORIGINAL DRAWING

rain Park reatment Williams ormwater Roger S



/ISIONS:	
5-25-23	ADDENDUM NO.1
DJECT NO.:	22220.00
ГЕ:	APRIL 2023
ALE:	NOT TO SCALE
SIGNED BY:	CRL
ECKED BY:	ВВ
AWN BY:	AWB \ AKL
PROVED BY	: BB

8 OF 15

DRAWING NO.

SHEET NO.

1'-0"

EXISTING EDGE OF PAVEMENT.

DRAIN TRENCH DETAIL NOT TO SCALE

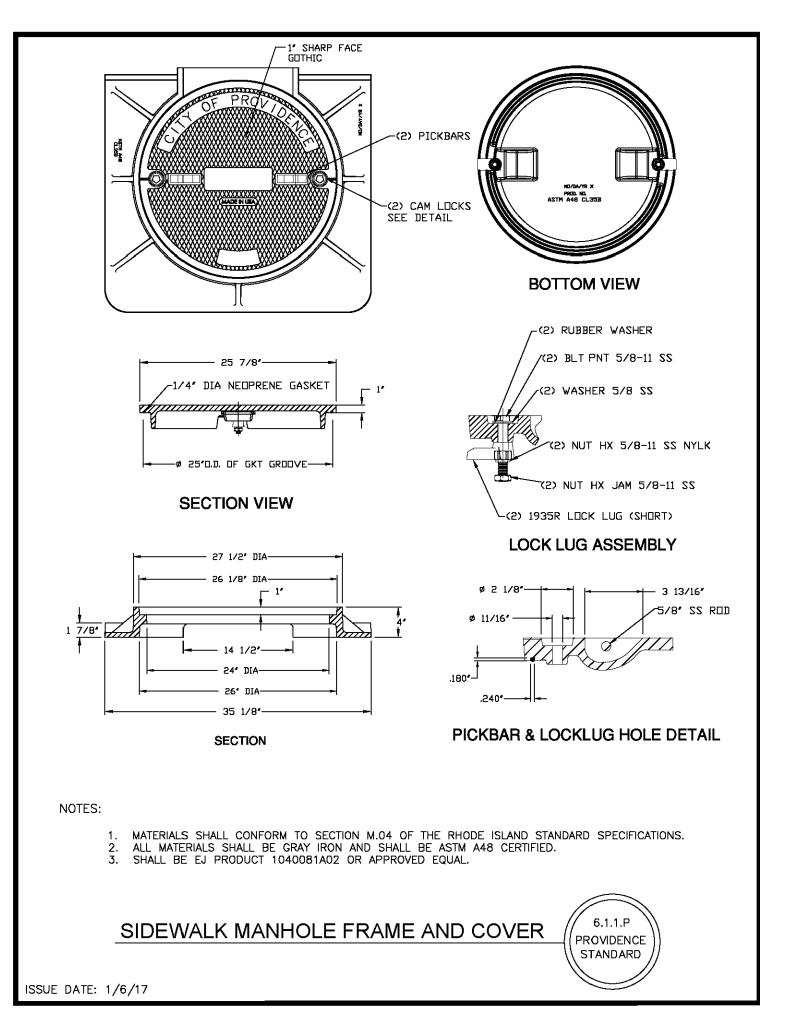
PIPE O.D.

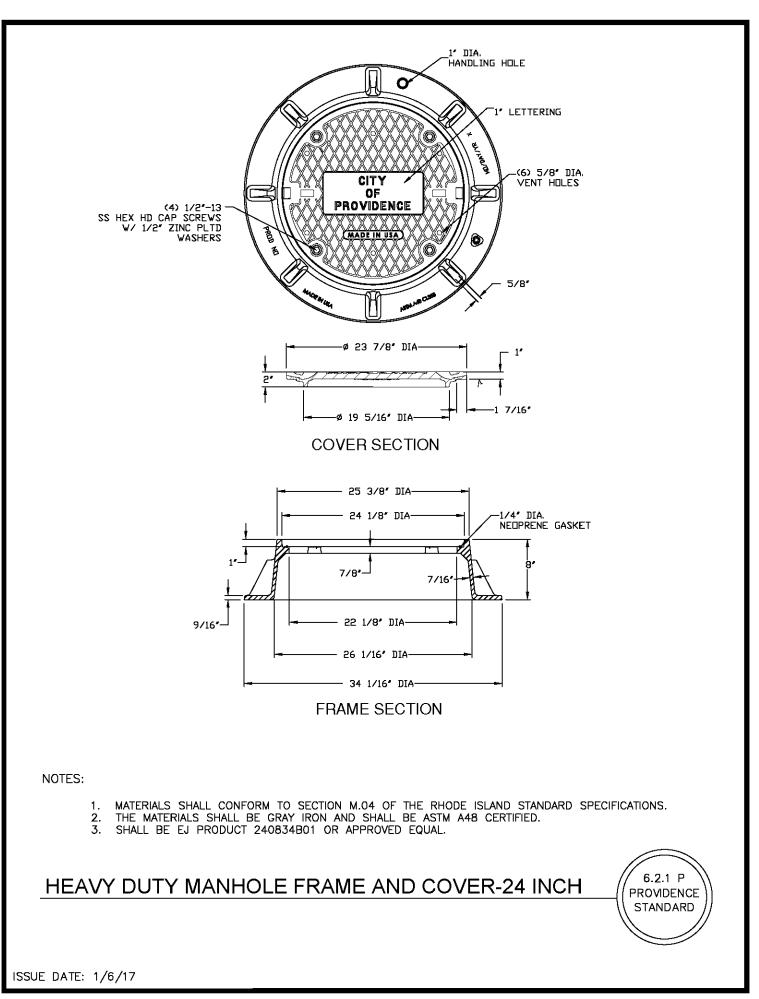
3'-0" MIN

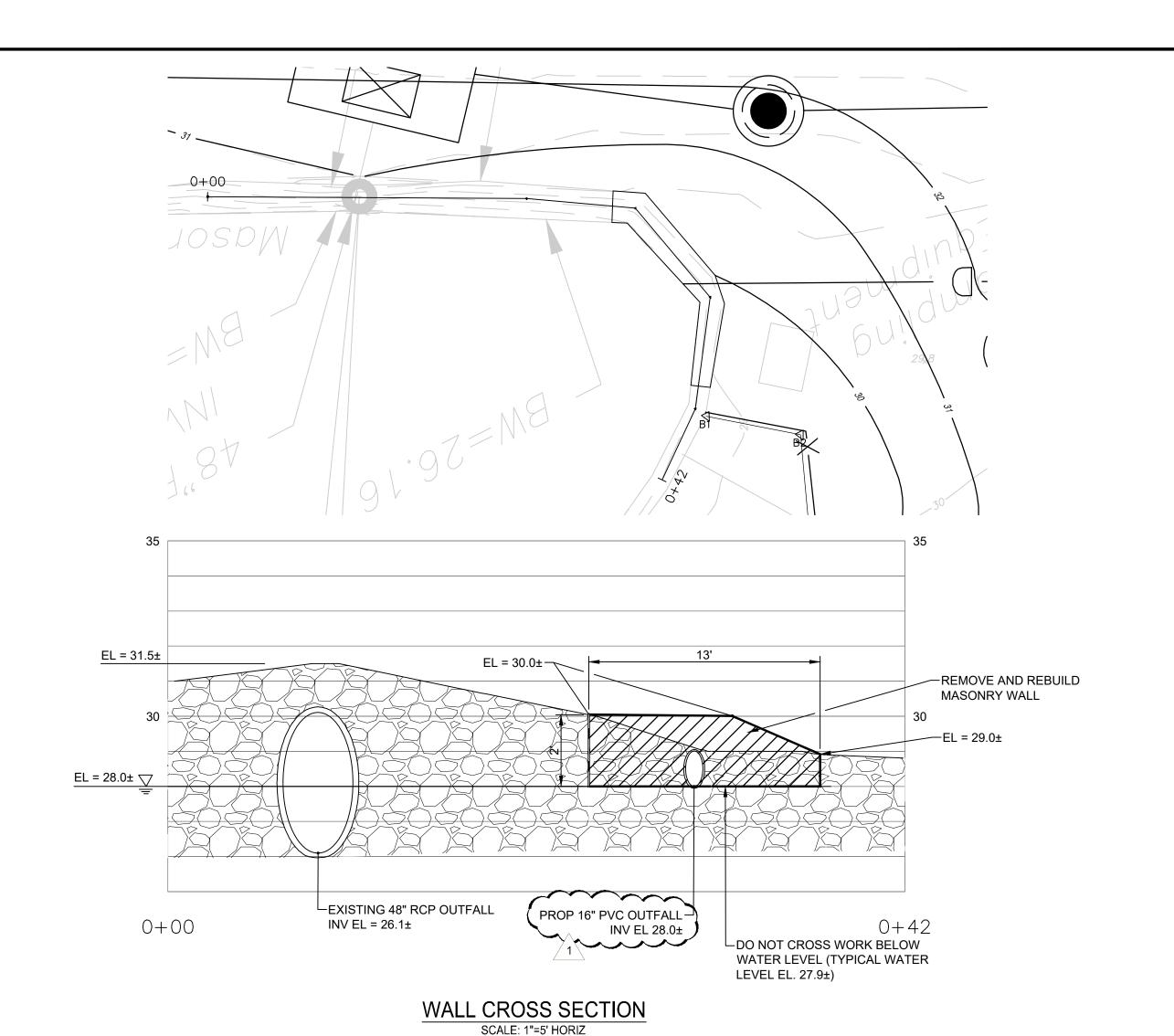
1. WHERE THE DISTANCE BETWEEN THE SAWCUT AND EDGE OF PAVEMENT IS 3' OR LESS, THE CONTRACTOR SHALL REPLACE THE PAVEMENT FROM THE TRENCH EDGE TO THE

2. 3/4" DIA. CRUSHED STONE SHALL BE USED AS BEDDING WHERE TRENCH IS BELOW THE

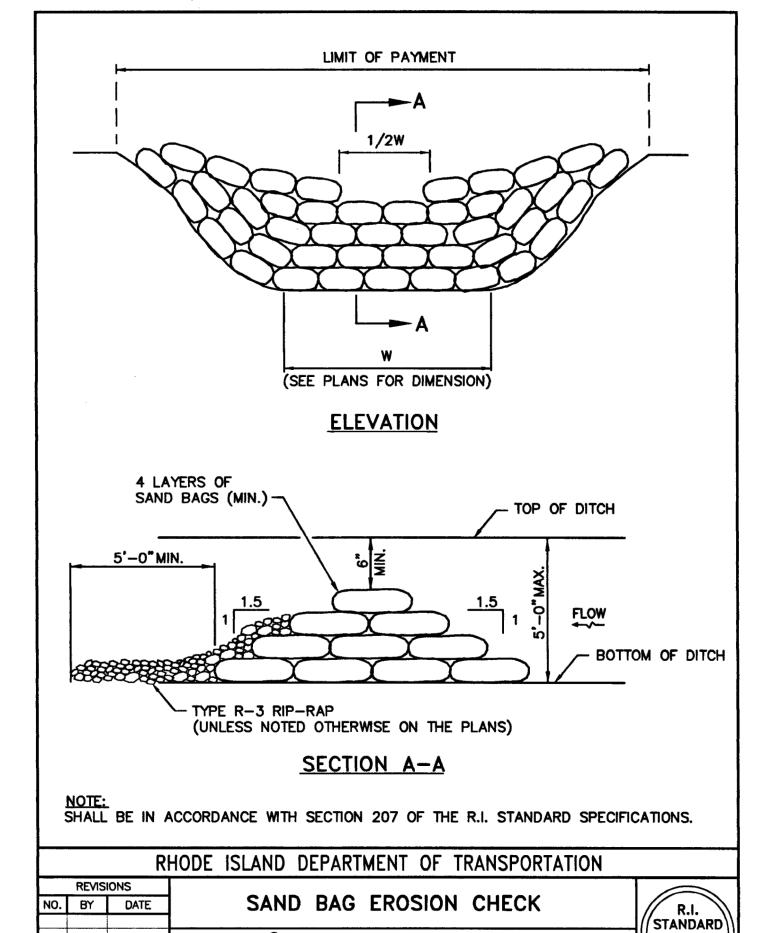
1'-0"



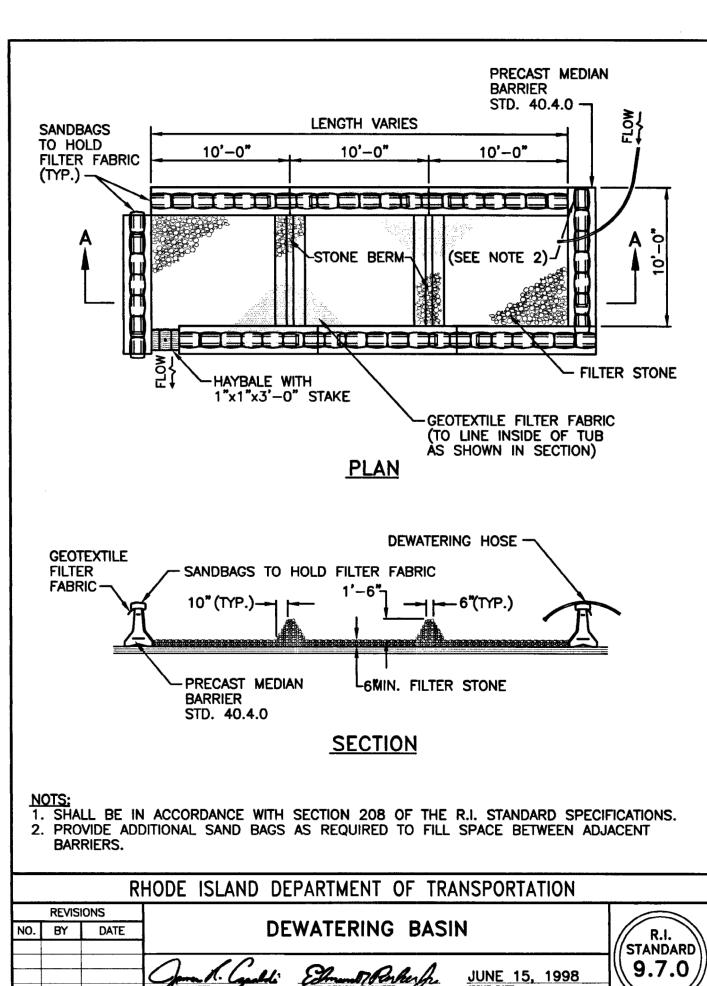


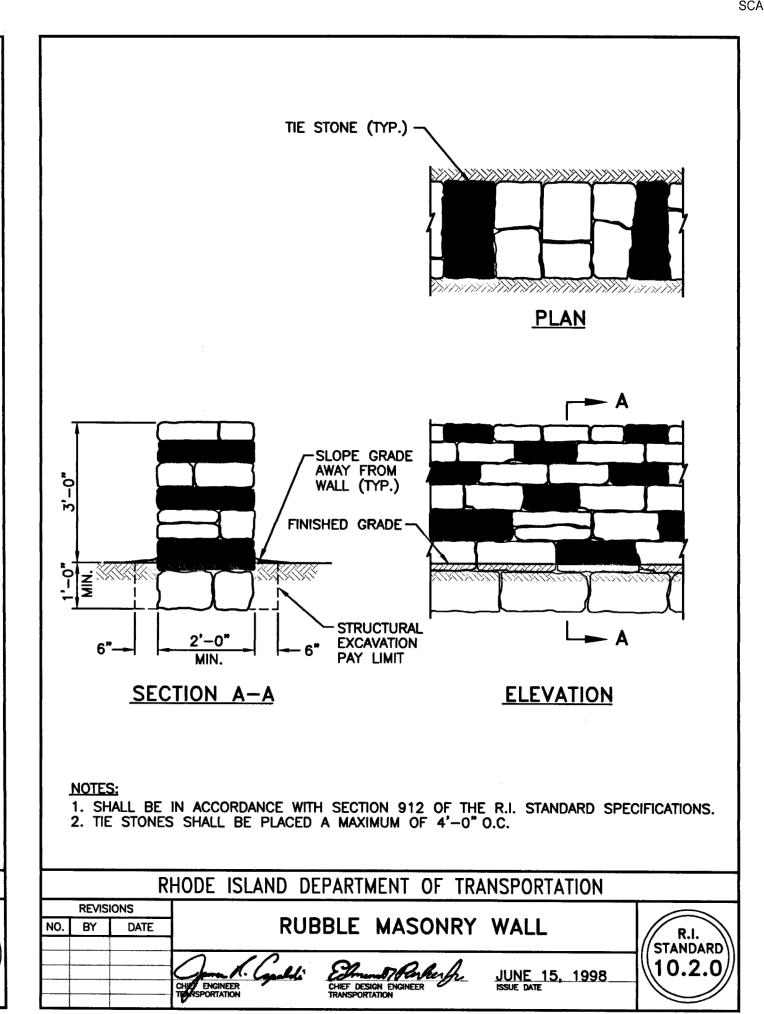


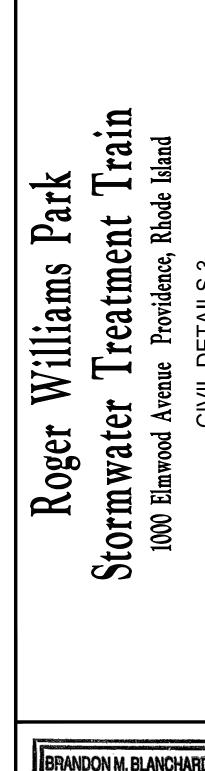
1"=2.5' VERT



9.6.0







PARE

SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON

ORIGINAL DRAWING

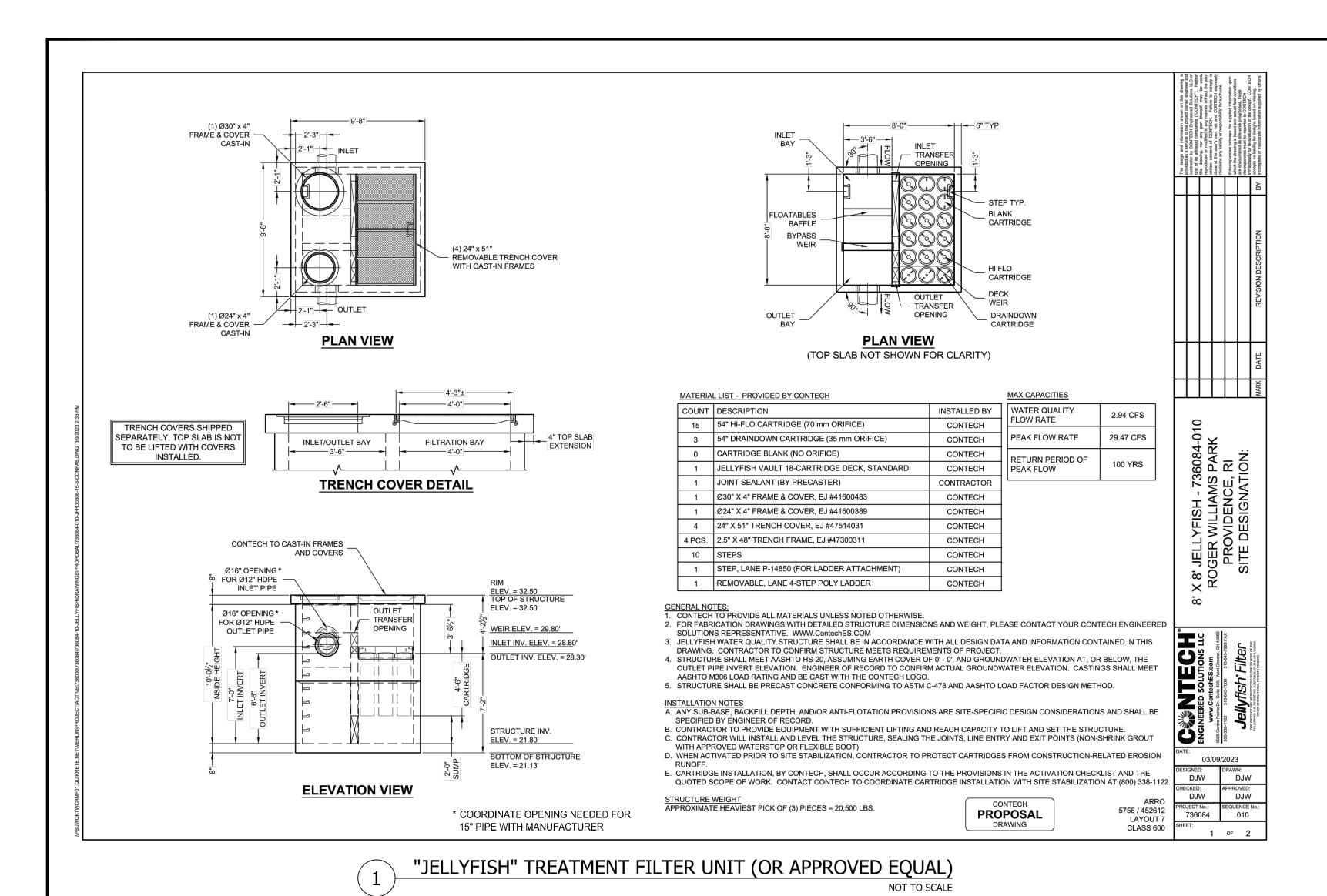
5-25-23 | ADDENDUM NO.1

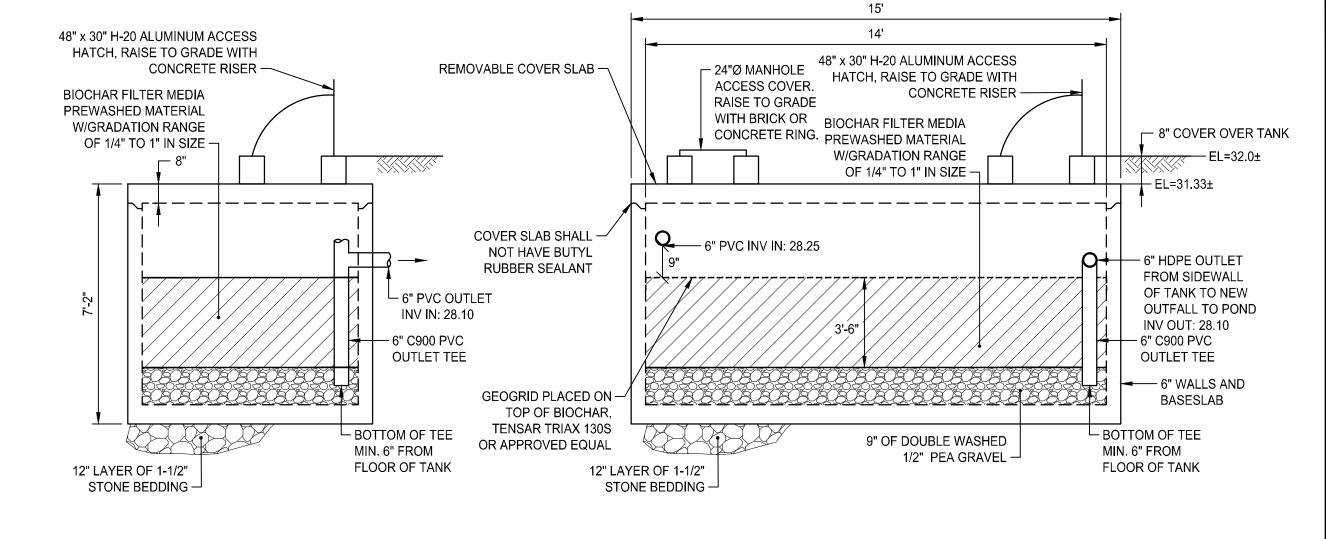
PROJECT NO.: 22220.00 APRIL 2023 NOT TO SCALE **DESIGNED BY:** CHECKED BY: DRAWN BY: AWB \ AKL

DRAWING NO.:

APPROVED BY:

SHEET NO. 9 OF 15





END VIEW

SIDE VIEW

1. STRUCTURE SHALL BE CAST TO ALLOW FOR TOP COVER TO BE REMOVED AS SHOWN ON THE DETAIL. BUTYL SEALANT SHALL NOT BE USED ON THIS JOINT.

2. ALL OTHER JOINTS SHALL BE SEALED WITH BUTYL RUBBER SEALANT.

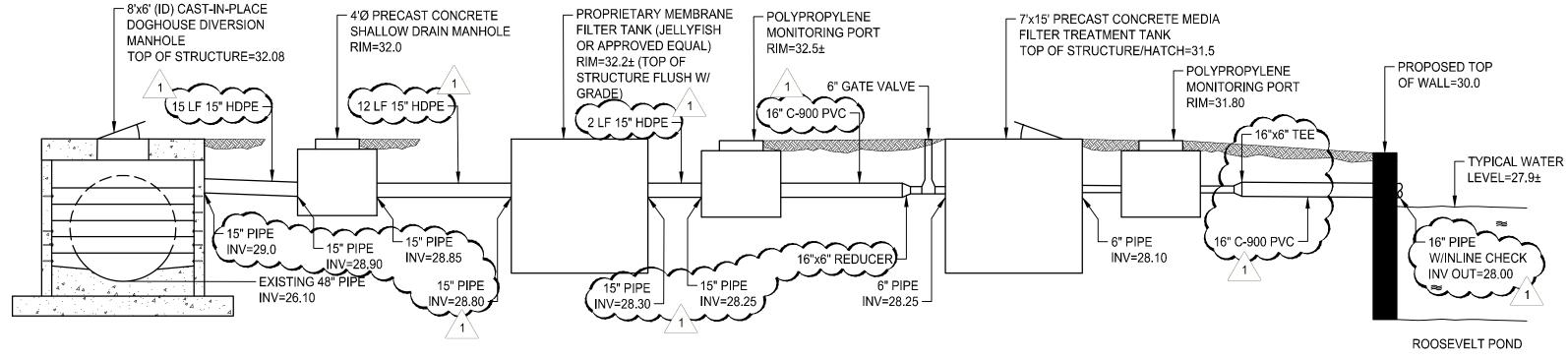
3. CONCRETE SHALL BE 5000 PSI @ 28 DAYS.

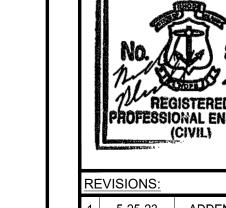
4. REINFORCING SHALL BE ASTM A-615 GRADE 60.

5. TANK AND ACCESS HATCH SHALL BE RATED FOR H-20 LOADING.

MEDIA FILTER TREATMENT SYSTEM DETAIL







5-25-23 ADDENDUM NO.1

PARE

SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON

ORIGINAL DRAWING

rain

Treatment

rmwater

0

IRANDON M. BLANCHARI

S

Park

Williams

Roger

PROJECT NO.: 22220.00 APRIL 2023 NOT TO SCALE

SCALE: **DESIGNED BY:** CHECKED BY: DRAWN BY: AWB \ AKL

DRAWING NO.

APPROVED BY:

SHEET NO. 10 OF 15

TREATMENT TRAIN SYSTEM PROFILE

### A. GENERAL STRUCTURAL REQUIREMENTS

- 1. ALL METHODS OF CONSTRUCTION, DETAILS, NOTES, ETC., INDICATED ON THE DRAWINGS ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.
- 2. CONSTRUCTION SHALL BE MADE FROM APPROVED SHOP DRAWINGS ONLY.
- 3. ELEVATIONS SHOWN ARE BASED OFF CIVIL DRAWINGS. REFER TO THESE DRAWINGS FOR FINAL ELEVATIONS.
- 4. DIMENSIONS AND ELEVATIONS OF EXISTING FEATURES HAVE BEEN OBTAINED FROM EXISTING DRAWINGS OR FIELD SURVEYS. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS THAT ARE REQUIRED FOR FABRICATION AND INSTALLATION OF STRUCTURES WITH FIELD MEASUREMENTS.
- 5. REFER TO CIVIL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS AND DIMENSIONS OF OTHER PROJECT REQUIREMENTS NOT INDICATED ON STRUCTURAL DRAWINGS.
- 6. ANY DISCREPANCIES ON THESE PLANS WITH REGARD TO DIMENSIONS OR CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION
- 7. ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT AND THE RHODE ISLAND STATE BUILDING CODE.
- 8. THE LATEST EDITION OF THE FOLLOWING LISTED CODES SHALL APPLY. IN CASE OF CONFLICT, THE MORE RIGID REQUIREMENTS AND CODES SHALL GOVERN.
- A. RHODE ISLAND STATE BUILDING CODE (STATE CODE): INTERNATIONAL BUILDING CODE, 2021 EDITION AND ITS APPLICABLE REFERENCED STANDARDS.
- B. AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS AND ITS CODE OF STANDARD PRACTICE (AISC).
- C. AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI
- D. AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR CONCRETE MASONRY STRUCTURES, ACI 530 AND ACI 530.1.
- 6. THE DESIGN LOADS ARE RESISTED BY THE COMPLETED STRUCTURE ACTING AS A UNIT. THE CONTRACTOR SHALL DESIGN AND PROVIDE ANY AND ALL TEMPORARY BRACING, SHORING, OR ADDITIONAL REINFORCEMENT NECESSARY TO RESIST LOADS IMPOSED ON ANY PORTION OF THE STRUCTURE THROUGHOUT ALL STAGES OF CONSTRUCTION. THE SHORING SHALL BE DESIGNED TO RESIST ALL DEAD LOADS AND ANY APPLICABLE CONSTRUCTION LOADS.
- 7. ALL SHORING DESIGNS AND PLANS SHALL BE STAMPED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER.
- 8. NOTES AND TYPICAL DETAILS APPLY TO ALL STRUCTURAL WORK UNLESS OTHERWISE NOTED. FOR CONDITIONS NOT SPECIFICALLY SHOWN PROVIDE DETAILS OF SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
- 9. PLANS SHALL NOT BE SCALED FOR DIMENSIONS

## **B. FOUNDATIONS**

- 1. NEW FOUNDATIONS HAVE BEEN DESIGNED BASED UPON A PRESUMPTIVE NET ALLOWABLE BEARING PRESSURE OF 1.5 KSF.
- 2. NO FOOTING OR SLAB SHALL BE PLACED ON FROZEN SOIL OR IN WATER.
- 3. UNSUITABLE BEARING MATERIALS, SUCH AS "FILL", "SUBSOIL", "BURIED ORGANIC SOILS", AND "TOPSOIL" MAY BE PRESENT BELOW PROPOSED FOOTINGS. EXISTING UNSUITABLE MATERIAL WITHIN THE FOUNDATION FOOTPRINT SHALL BE OVER EXCAVATED AND REPLACED WITH COMPACTED SAND-GRAVEL FILL.
- 4. ALL SURFACE WATER SHALL BE DIVERTED AWAY FROM EXCAVATION BY THE CONTRACTOR. CONTRACTOR SHALL MAINTAIN CONTINUOUS CONTROL OF SURFACE AND SUBSURFACE WATER DURING CONSTRUCTION SO THAT WORK IS DONE UNDER DRY CONDITIONS.
- 5. SHORING AND BRACING FOR THE LATERAL SUPPORT OF EXCAVATION SHALL REMAIN IN PLACE UNTIL ALL PERMANENT STRUCTURAL SYSTEMS ARE COMPLETE.
- 6. PERCENT COMPACTION IS DEFINED AS THE RATIO OF THE FIELD DRY DENSITY, DETERMINED BY ASTM D-6938, TO THE MAXIMUM DRY DENSITY, DETERMINED BY ASTM D-1557 (MODIFIED PROCTOR).
- 7. COMPACT BACKFILL UNDER ALL FOUNDATION TO A MINIMUM OF 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557, UNLESS OTHERWISE INDICATED OR SPECIFIED. FREQUENCY OF COMPACTION TESTING SHALL BE INDICATED BY THE GEOTECHNICAL ENGINEER AND PROJECT SPECIFICATIONS.
- 8. DO NOT BACKFILL AGAINST CONCRETE WALLS UNTIL CONCRETE HAS REACHED THE 28-DAY SPECIFIED DESIGN STRENGTH.
- 9. BACKFILL SHALL BE PLACED AND COMPACTED SIMULTANEOUSLY ON BOTH SIDES OF CONCRETE WALLS WHEREVER POSSIBLE.
- 10. ANY BOULDER, LEDGE, OR ANY OTHER OBSTRUCTION LOCATED WITHIN THE CONSTRUCTION AREA SHALL BE REMOVED TO A DEPTH OF AT LEAST 12" (MIN.) BELOW FOUNDATION. VOIDS SHALL BE BACKFILLED WITH COMPACTED SAND-GRAVEL FILL APPROVED BY THE GEOTECHNICAL ENGINEER.
- 11. PROOF-COMPACTION AND SUBGRADE PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND VERIFIED BY THE GEOTECHNICAL ENGINEER.
- 12. FOUNDATION SHALL REST ONLY ON 6" (MIN.) OF CRUSHED STONE (WELL GRADED, 3/8" TO 3/4"). IF A LAYER GREATER THAN 6" IS USED, IT SHALL BE WRAPPED IN NON-WOVEN GEOTEXTILE FABRIC.

## C. CAST-IN-PLACE CONCRETE

- 1. CONCRETE WORK SHALL CONFORM TO THE LATEST EDITIONS OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND STATE CODE.
- 2. CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED UNDER THE SUPERVISION OF THE APPROVED TESTING AGENCY.
- 3. UNLESS NOTED OTHERWISE, CONCRETE SHALL BE NORMAL WEIGHT, WITH TYPE II CEMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS AS FOLLOWS:
- A. 5,000 PSI 3/4" AGGREGATE-TYPICAL, U.N.O.
- 4. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE AIR-ENTRAINED WITH AN AIR CONTENT OF 6%± 1%.
- 5. CALCIUM CHLORIDE SHALL NOT BE USED.
- 6. ALL CONSTRUCTION JOINT LOCATIONS MUST BE SHOWN ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER. CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS SHALL BE LOCATED SO AS TO LEAST IMPAIR THE STRENGTH OF THE STRUCTURE AND SHOULD GENERALLY BE LOCATED AT MIDSPAN OR AT POINTS OF MINIMUM SHEAR.
- 7. ALL TYPES OF SLABS AND WALLS SHALL BE PLACED WITHOUT HORIZONTAL CONSTRUCTION JOINTS UNLESS SPECIFICALLY SHOWN ON THE DRAWINGS OR APPROVED IN WRITING BY THE ENGINEER. ALL CONSTRUCTION JOINTS SHALL BE FORMED WITH A STANDARD KEY OR WITH A ROUGHENED SURFACE, UNLESS SHOWN OTHERWISE.
- 8. ALL SHORING SHALL REMAIN IN PLACE UNTIL CONCRETE HAS ATTAINED ITS SPECIFIED 28-DAY MINIMUM COMPRESSIVE STRENGTH.
- 9. PROVIDE A SMOOTH RUBBED SURFACE, FREE FROM BURRS, TIE HOLES, HONEYCOMBING, ETC. ON EXPOSED CONCRETE SURFACES.
- 10. ALL EXPOSED EDGES SHALL BE CHAMFERED 1" UNLESS NOTED OTHERWISE.
- 11. WHEN CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE INTERFACE SHALL BE CLEAN, FREE OF LAITANCE, AND INTENTIONALLY ROUGHENED TO FULL AMPLITUDE OF APPROXIMATELY 1/4
- 12. AT ALL CONSTRUCTION JOINTS NOT DESIGNATED TO BE CONTROL JOINTS, NEW CONCRETE SHALL BE EPOXY BONDED TO HARDENED CONCRETE WITH SIKADUR 32 H1-MOD LPL MANUFACTURED BY SIKA CORP. OR ENGINEER APPROVED EQUAL. APPLY PER MANUFACTURER'S RECOMMENDED ABOVE.
- 13. ELASTOMERIC JOINT SEALANT SHALL BE "SIKAFLEX 1CSL" BY SIKA CORP. OR ENGINEER APPROVED EQUAL
- 14. ALL CONCRETE SHALL BE PLACED IN THE DRY.
- 15. PROVIDE PVC WATERSTOPS AT ALL KEYED/CONSTRUCTION JOINTS.

### D. REINFORCING STEEL

- 1. REINFORCING BARS SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES AND THE STATE CODE.
- 2. COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK. ALL ACCESSORIES MUST BE SHOWN ON THE SHOP DRAWINGS.
- 3. REINFORCING BARS SHALL CONFORM TO ASTM A615 OR A706 (WELDABLE) GRADE 60.
- 4. REINFORCING STEEL SHALL BE EPOXY COATED. ALL SUPPORTS SUCH AS CHAIRS, BOLSTERS, SPACERS, BLOCKS AND HANGERS SHALL BE OF NON-CORROSIVE MATERIAL. PROVIDE MINIMUM #5 SUPPORT BAR.
- 5. UNLESS NOTED ON THE DRAWINGS, THE MINIMUM CONCRETE PROTECTION (CLEAR COVER) FOR CAST-IN-PLACE CONCRETE COVER SHALL BE AS FOLLOWS:
- A. CONCRETE PLACED AGAINST EARTH B. FORMED CONCRETE EXPOSED TO EARTH OR WATER

36 BAR DIA

- 6. ALL MECHANICAL SLEEVE CONNECTIONS SHALL CONFORM TO ACI 318 REQUIREMENTS AND DEVELOP IN TENSION AND COMPRESSION AT LEAST 125% OF THE YIELD STRENGTH OF THE BAR.
- 7. ALL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
- 8. UNLESS NOTED OTHERWISE, BARS SHALL BE CONTINUOUS AND SHALL RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. SPLICES SHALL GENERALLY OCCUR AT MID-SPAN FOR TOP AND MIDDLE BARS, AT SUPPORT FOR BOTTOM BARS AND SHALL BE STAGGERED WHEREVER POSSIBLE.
- 9. MINIMUM REINFORCEMENT DEVELOPMENT LENGTH AND LAP SPLICE LENGTHS SHALL BE IN ACCORDANCE WITH ACI 318 FOR CLASS B LAPS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 10. PROVIDE ADDITIONAL #5 BAR REINFORCEMENT ALONG EACH SIDE OF OPENINGS (AND EACH FACE). UNLESS NOTED OTHERWISE. BARS SHALL EXTEND AT LEAST 1'-0" BEYOND THE OPENING PERIMETER.

LAP OUTSIDE BARS

BARS AS SHOWN

CORNERS

OR PROVIDE CORNER

HORIZ BARS

### **ABBREVIATIONS** ADD'L **ADDITIONAL** ALTERNATE

A.B. **ANCHOR BOLT** ARCH ARCHITECT BOTTOM BEW **BOTTOM EACH WAY** BM BOF **BOTTOM OF FOOTING** BRG BEARING **BOTH SIDES** 

CAMBER **CFMF** COLD FORMED METAL FRAMING CIP CAST-IN-PLACE CLR. CLEAR COL COLUMN

COMP. CONCRETE CMU CONCRETE MASONRY UNIT CONTROL JOINT CONST. J7 CONSTRUCTION JOINT CONST CONTINUOUS

DIA or Ø DIAMETER DWL'S **DOWELS** DWG DRAWING EA. EACH **EACH FACE** 

**EACH WAY ELEVATION EXPANSION JOINT EQUAL** FAR FACE FFE FINISH FLOOR ELEVATION FND FOUNDATION

FTG FOOTING GAUGE **GALV** GALVANIZED G.C. GENERAL CONTRACTOR HORIZ. HORIZONTAL

HSS HOLLOW STRUCTURAL SHAPE INSIDE FACE LONG. LONGITUDINAL LLV LONG LEG VERTICAL LONG WAY L.W. LIGHT WEIGHT CONCRETE L.W.

MAX. MAXIMUM MECH **MECHANICAL** M.M. MISCELLANEOUS METAL MINIMUM MTL. METAL

**NEAR FACE** NON SHRINK NTS NOT TO SCALE ON CENTER PLATE OPNG. OPENING

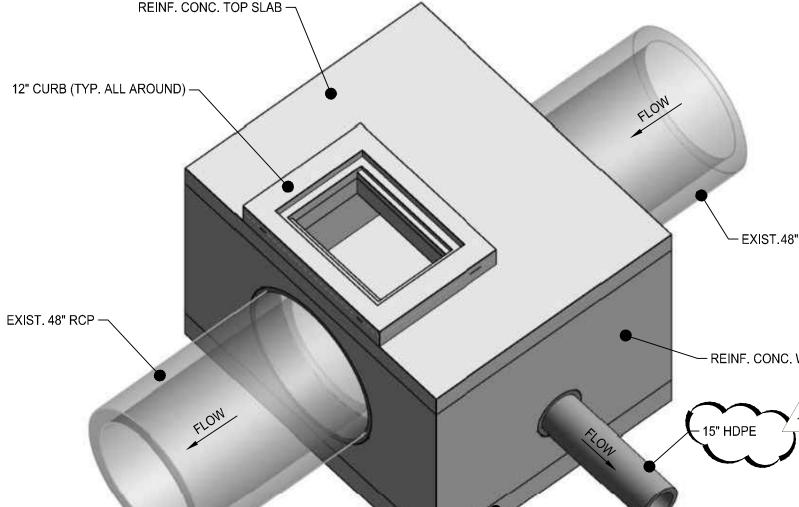
R&D REMOVE AND DISPOSE **REINF** REINFORCING SHEAR CONNECTOR SLV SHORT LEG VERTICAL

SOG SLAB ON GRADE S.S. STAINLESS STEEL STIFF STIFFENER STEEL SAWN JOINT

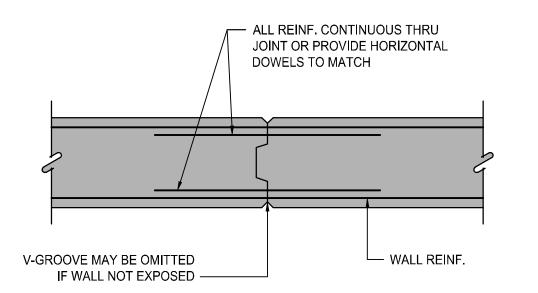
TCX TOP CHORD EXTENSION THICK TOP OF CONCRETE TOF TOP OF FOOTING

TOW TOP OF WALL **TRANS TRANSVERSE** TSL TOP OF SLAB TST TOP OF STEEL TYP. TYPICAL U.N.O. UNLESS NOTED OTHERWISE

VERT. VERTICAL V.I.F. VERIFY IN FIELD WWF WELDED WIRE FABRIC WITH W.P. **WORKING POINT** 

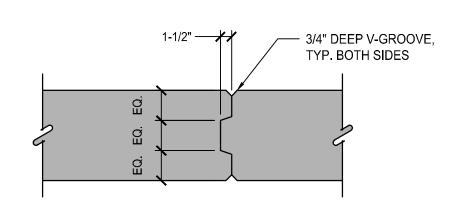


DOGHOUSE DIVERSION MANHOLE ISOMETRIC

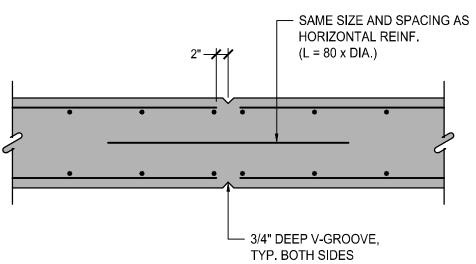


PROVIDE CONSTRUCTION JTS @ 60' O.C. (MAX.) ALTERNATE PLACING OF PANELS, ALLOWING 36 HOURS FROM THE END OF ONE POUR TO THE BEGINNING OF ADJACENT POURS.

TYPICAL CONCRETE WALL CONSTRUCTION JOINT DETAIL NOT TO SCALE



TYPICAL KEY DETAIL NOT TO SCALE

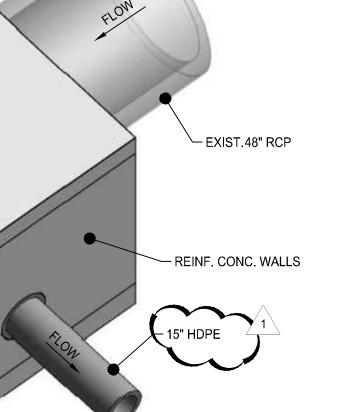


NOTES:

- 1. SPACE AT 20'-0" CENTER TO CENTER MAX.
- 2. CONSTRUCTION JOINT MAY BE SUBSTITUTED FOR A CONTROL JOINT

NOT TO SCALE

TYPICAL CONCRETE WALL CONTROL JOINT DETAIL



SCALE ADJUSTMENT GUIDE BAR IS ONE INCH ON ORIGINAL DRAWING

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**EVISIONS:** 5-25-23 | ADDENDUM NO.1 PROJECT NO.: 22220.00 **APRIL 2023** SCALE:

NOT TO SCALE **DESIGNED BY:** MJR MJR CHECKED BY: DRAWN BY: MJR APPROVED BY:

11 OF 15

DRAWING NO.

SHEET NO.

TYPICAL PLAN OF HORIZONTAL REINFORCING OF CONCRETE AND FOUNDATION WALLS

**ENDS** 

**U-BARS AT OPENINGS** AND DISCONTINUED ENDS OF WALLS —

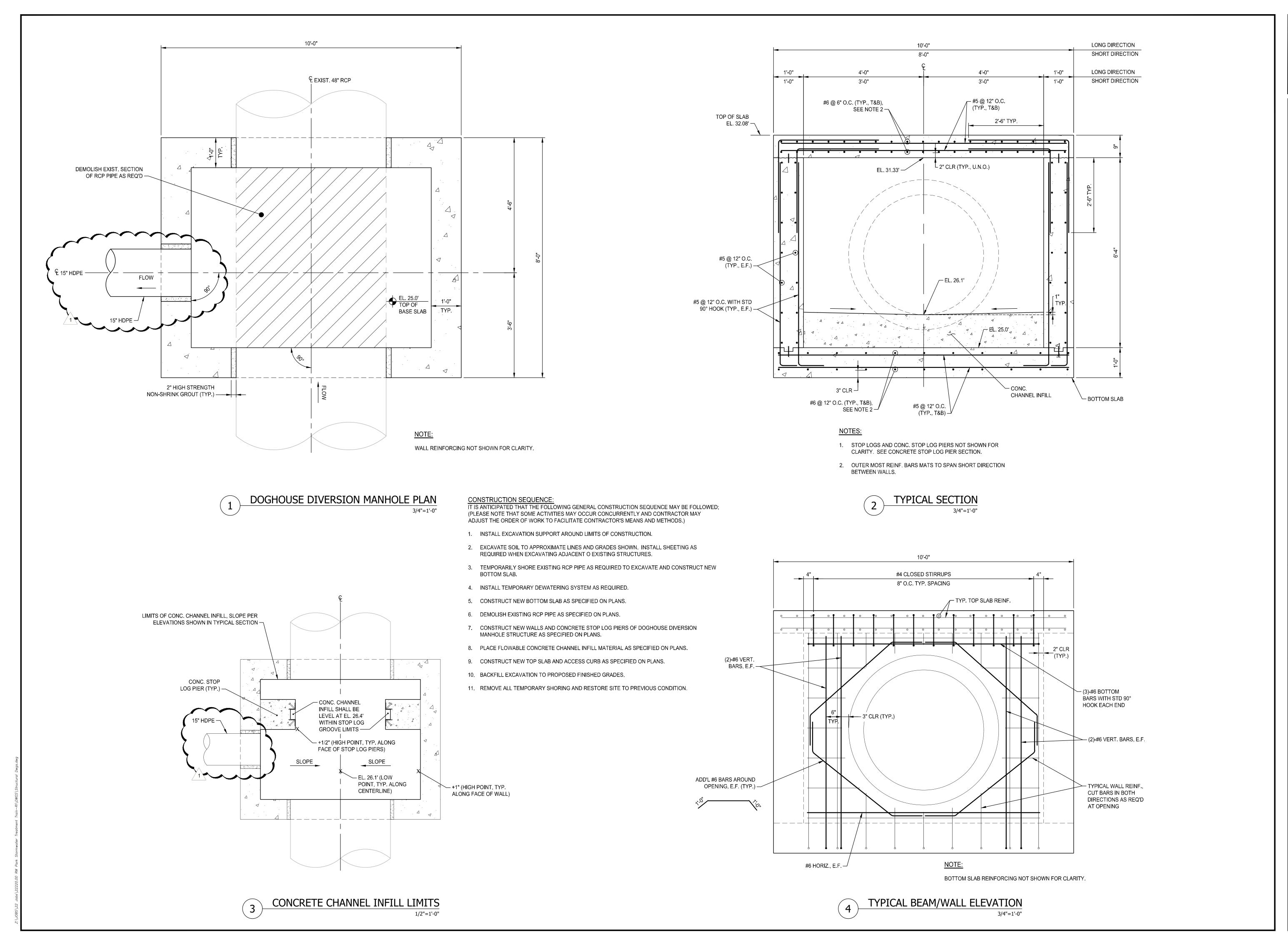
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INTERSECTIONS

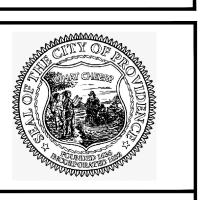
— CONT. KEY

— TO MATCH HORIZ.

REINFORCING







SCALE ADJUSTMENT GUIDE BAR IS ONE INCH ON ORIGINAL DRAWING

rain Park reatment Williams ormwater Roger St

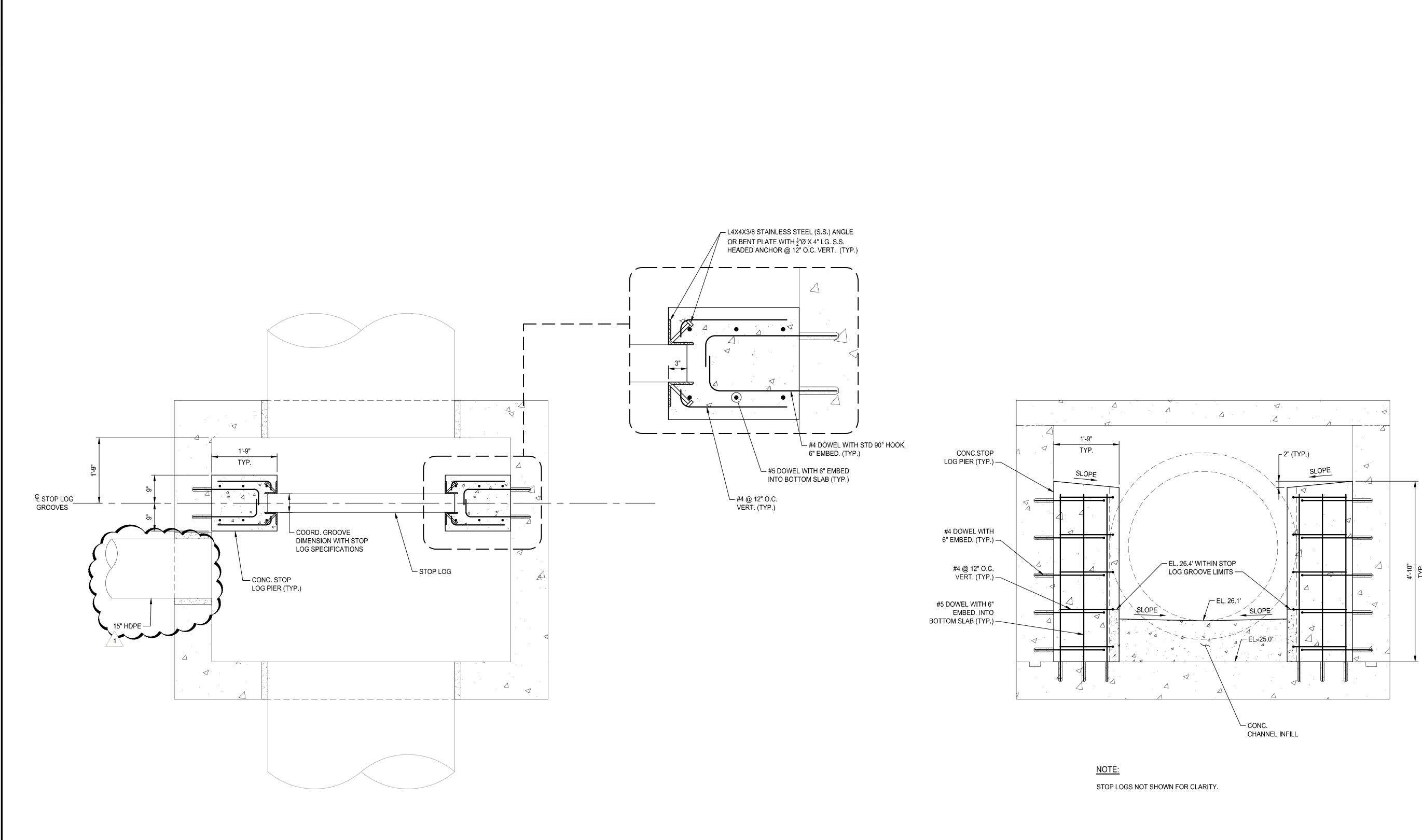
REVISIONS: 5-25-23 | ADDENDUM NO.1

PROJECT NO.: 22220.00 APRIL 2023 SCALE: AS SHOWN MJR

DESIGNED BY: CHECKED BY: DRAWN BY: APPROVED BY: MJR

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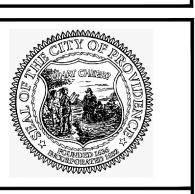
SHEET NO. 12 OF 15



CONCRETE STOP LOG PIER PLAN

CONCRETE STOP LOG PIER SECTION
3/4"=1'-0"





SCALE ADJUSTMENT GUIDE

0" 1"

BAR IS ONE INCH ON ORIGINAL DRAWING

Roger Williams Park
Stormwater Treatment Train
1000 Elmwood Avenue Providence, Rhode Island
DOGHOUSE DIVERSION MANHOLE
PLANS AND SECTIONS - 2

 REVISIONS:

 1
 5-25-23
 ADDENDUM NO.1

5-25-23 ADDENDUM NO.2

PROJECT NO.: 22220.00

DATE: APRIL 2023

SCALE: AS SHOWN

DESIGNED BY: MJR

CHECKED BY: MJR

MJR

CHECKED BY:
DRAWN BY:
APPROVED BY:

DRAWING NO.:

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SHEET NO. 13 OF 15